## LYNN WATER AND SEWER COMMISSION

# PHASE 2 WEST LYNN SEWER SEPARATION

DESIGN DEVELOPMENT PHASE JANUARY 2019 STANTEC JOB NO. 195130174

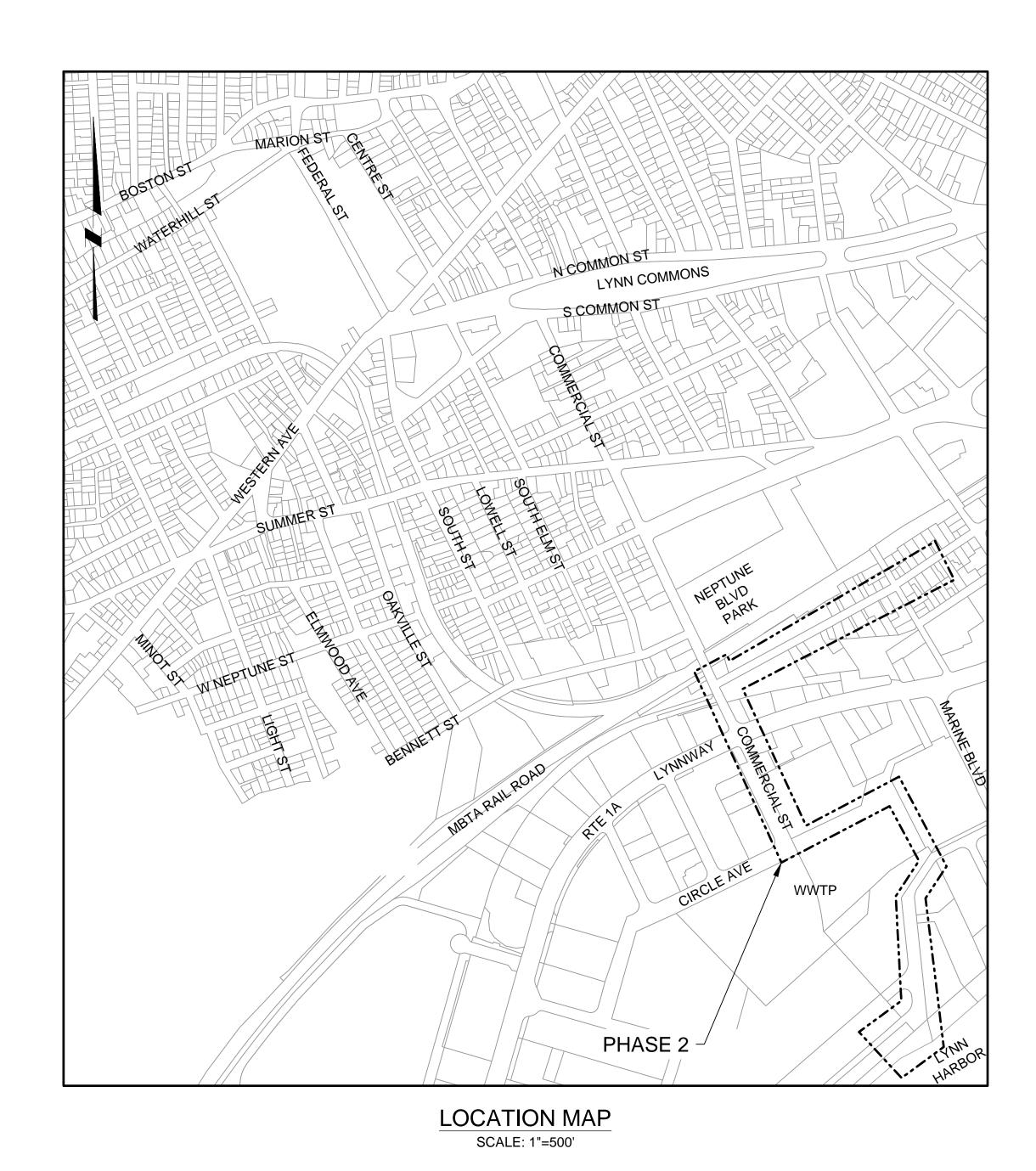
PREPARED FOR:



PREPARED BY PROJECT DESIGN TEAM:







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DESIGN DEVELOPMENT PHASE - 1/31/19

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ENERGY DISSIPATION STRUCTURE ISOMETRIC

PLAN AND PROFILE LRWTP STA 22+00 TO STA 26+00

GENERAL

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JANUARY 2019

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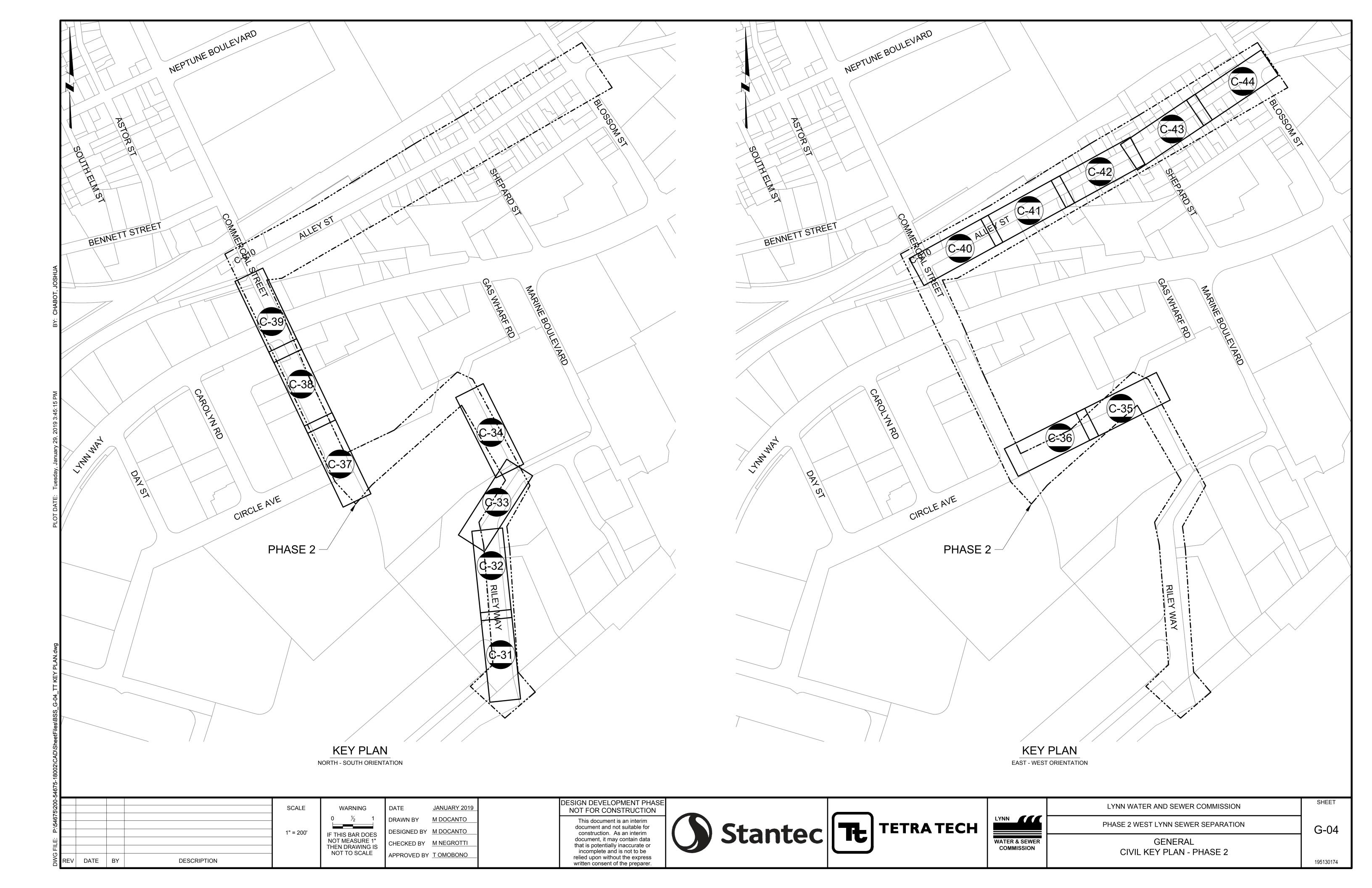


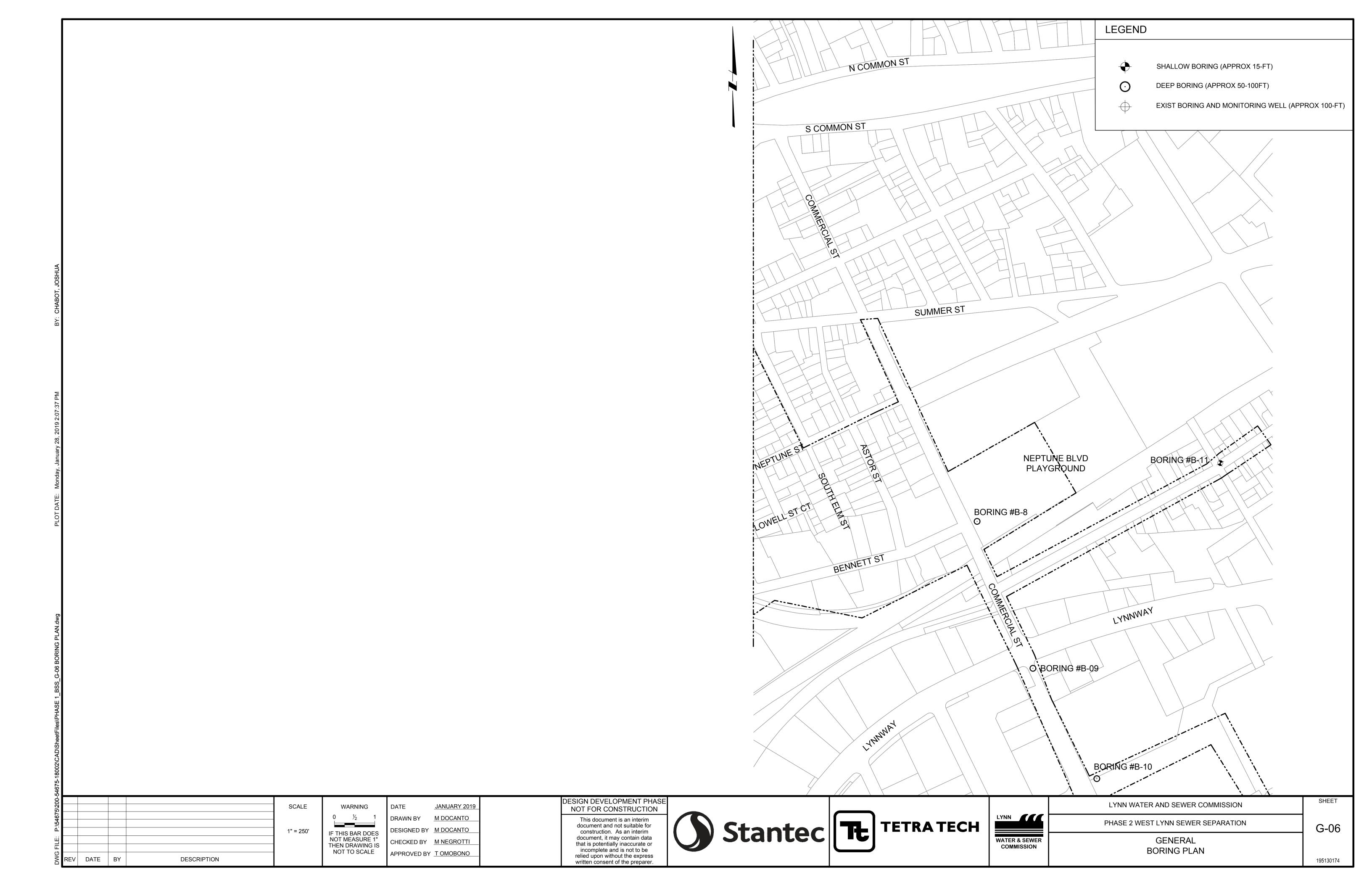
LYNN WATER AND SEWER COMMISSION PHASE 2 WEST LYNN SEWER SEPARATION GENERAL

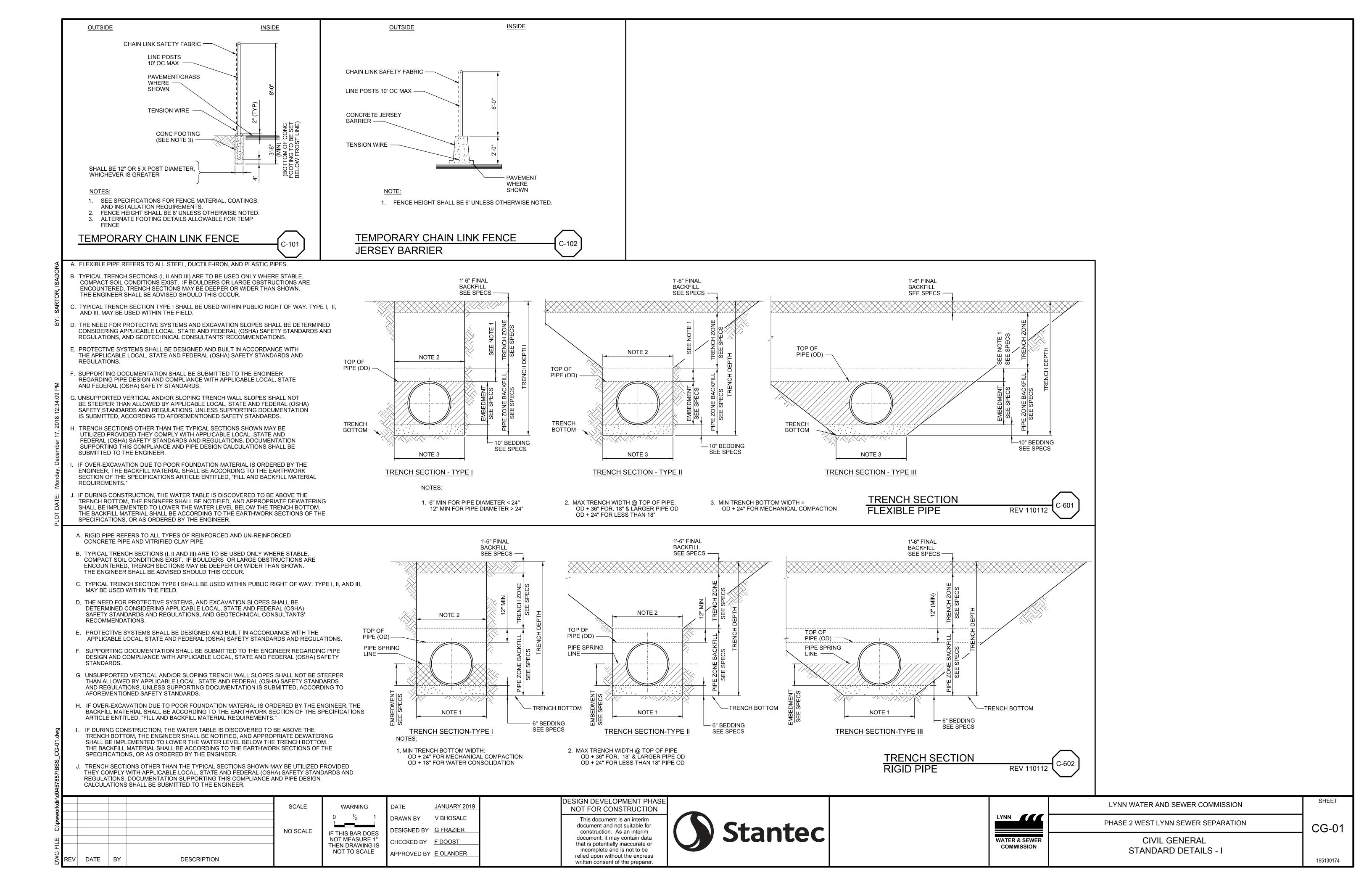
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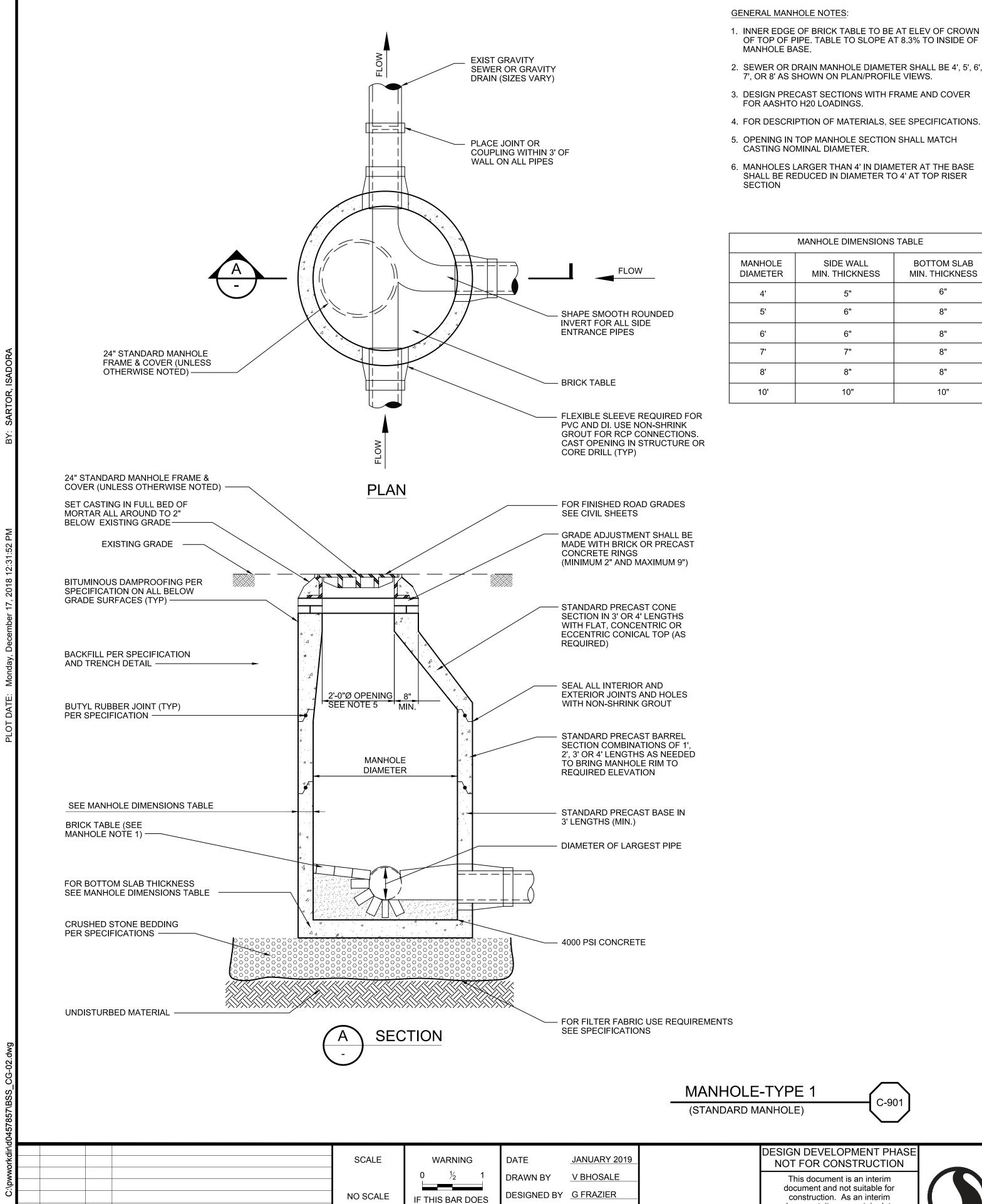
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- 1. INNER EDGE OF BRICK TABLE TO BE AT ELEV OF CROWN OF TOP OF PIPE. TABLE TO SLOPE AT 8.3% TO INSIDE OF
- 2. SEWER OR DRAIN MANHOLE DIAMETER SHALL BE 4', 5', 6',
- 3. DESIGN PRECAST SECTIONS WITH FRAME AND COVER

- 6. MANHOLES LARGER THAN 4' IN DIAMETER AT THE BASE SHALL BE REDUCED IN DIAMETER TO 4' AT TOP RISER

MANHOLE DIMENSIONS TABLE					
MANHOLE DIAMETER	SIDE WALL MIN. THICKNESS	BOTTOM SLAB MIN. THICKNESS			
4'	5"	6"			
5'	6"	8"			
6'	6"	8"			
7'	7"	8"			
8'	8"	8"			
10'	10"	10"			

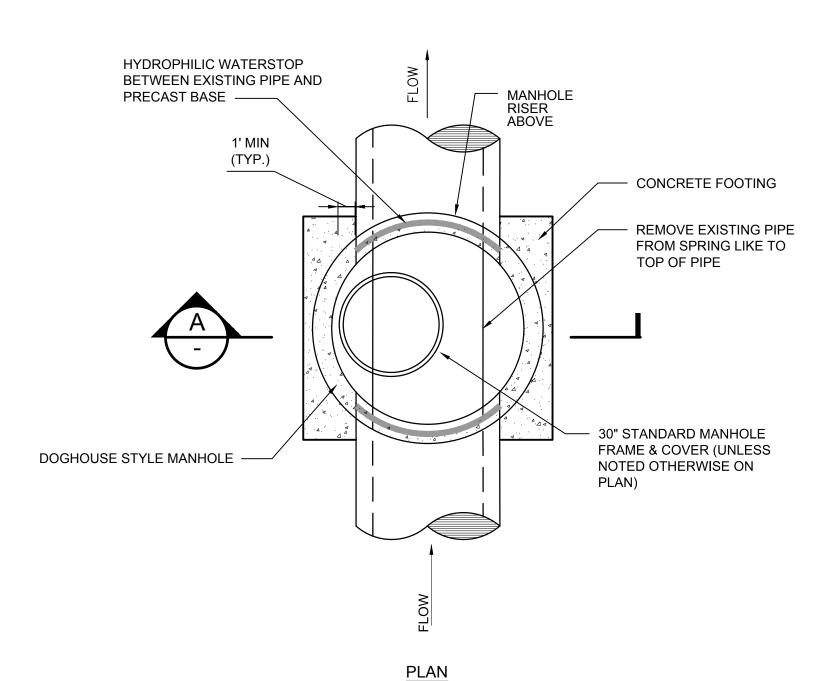
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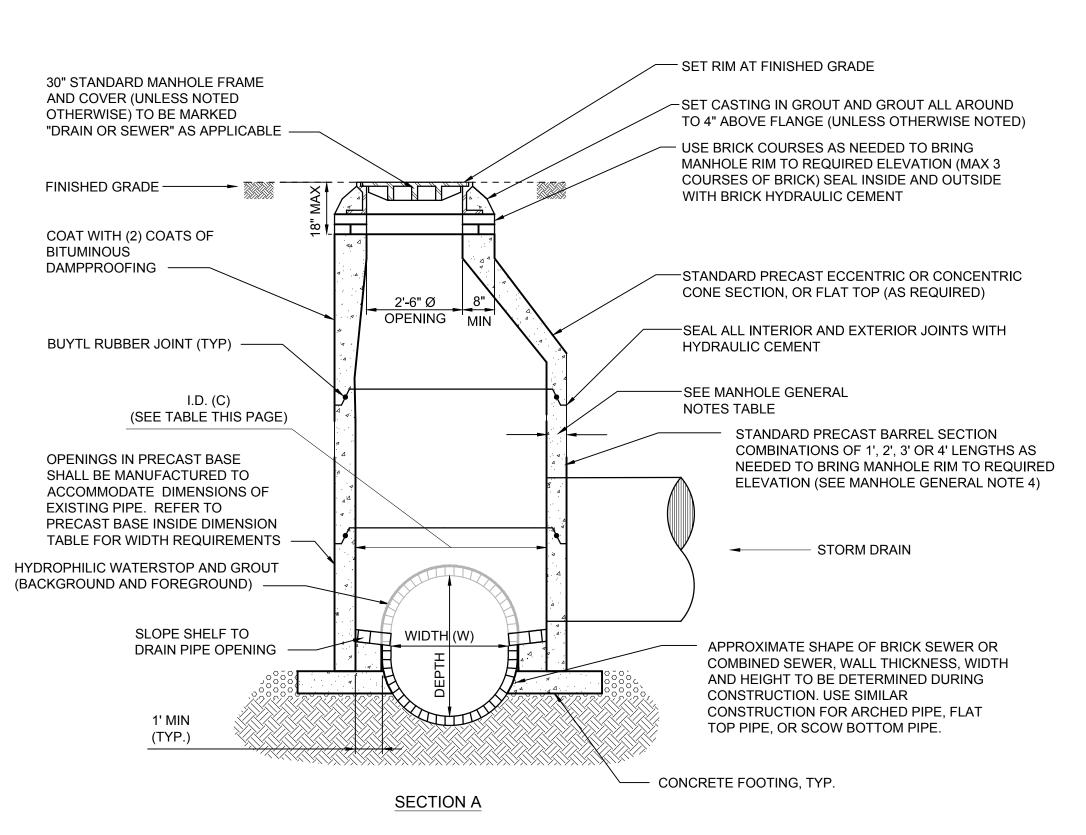
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### PRECAST BASE INSIDE DIMENSION TABLE

PIPE WIDTH (W)	I.D. (C)
8" TO 24"	4' Ø
27" TO 36"	5' Ø
48" TO 66"	6' Ø
66" TO 72"	8' Ø
> 72"	10' Ø

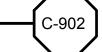
I.D. = INSIDE DIMENSION



NOTE:

1. REMOVE EXISTING BRICK PIPE TO SPRING LINE WITHIN THE INSIDE OF THE PRECAST MANHOLE BASE AND CONSTRUCT THE INVERT TO THE SPRING LINE AS SHOWN.

### PRECAST DROP OVER MANHOLE-TYPE 2







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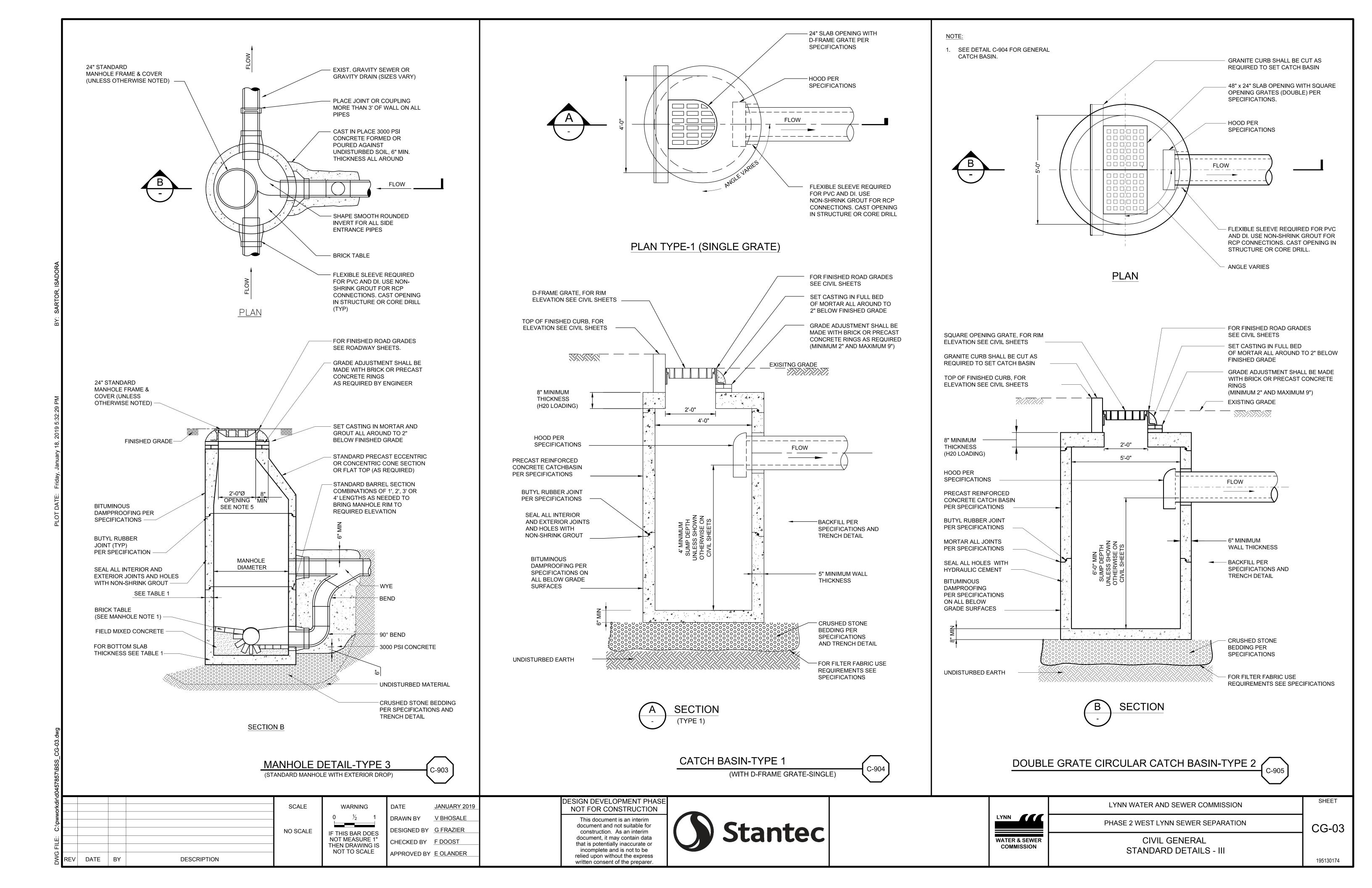
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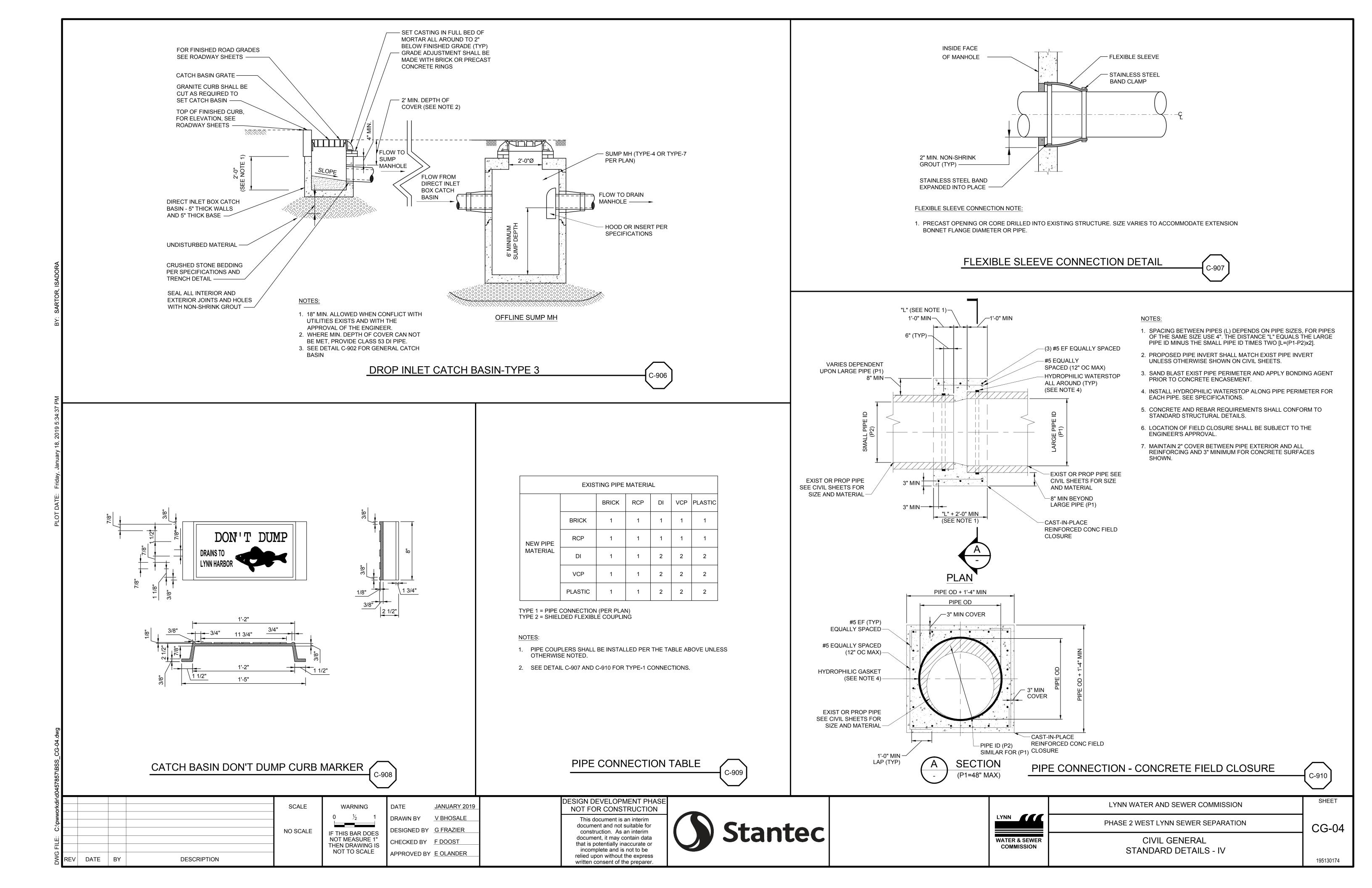
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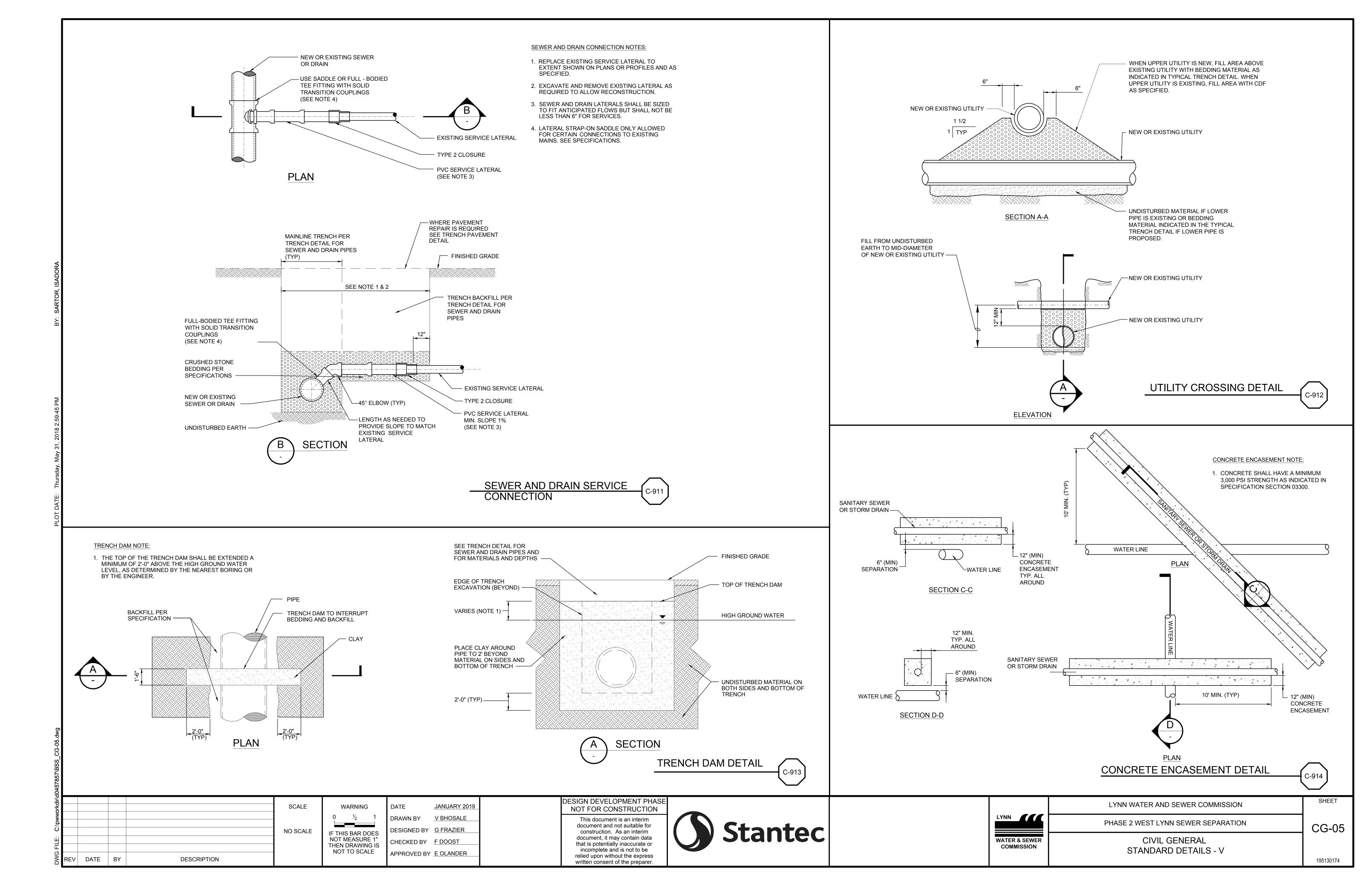
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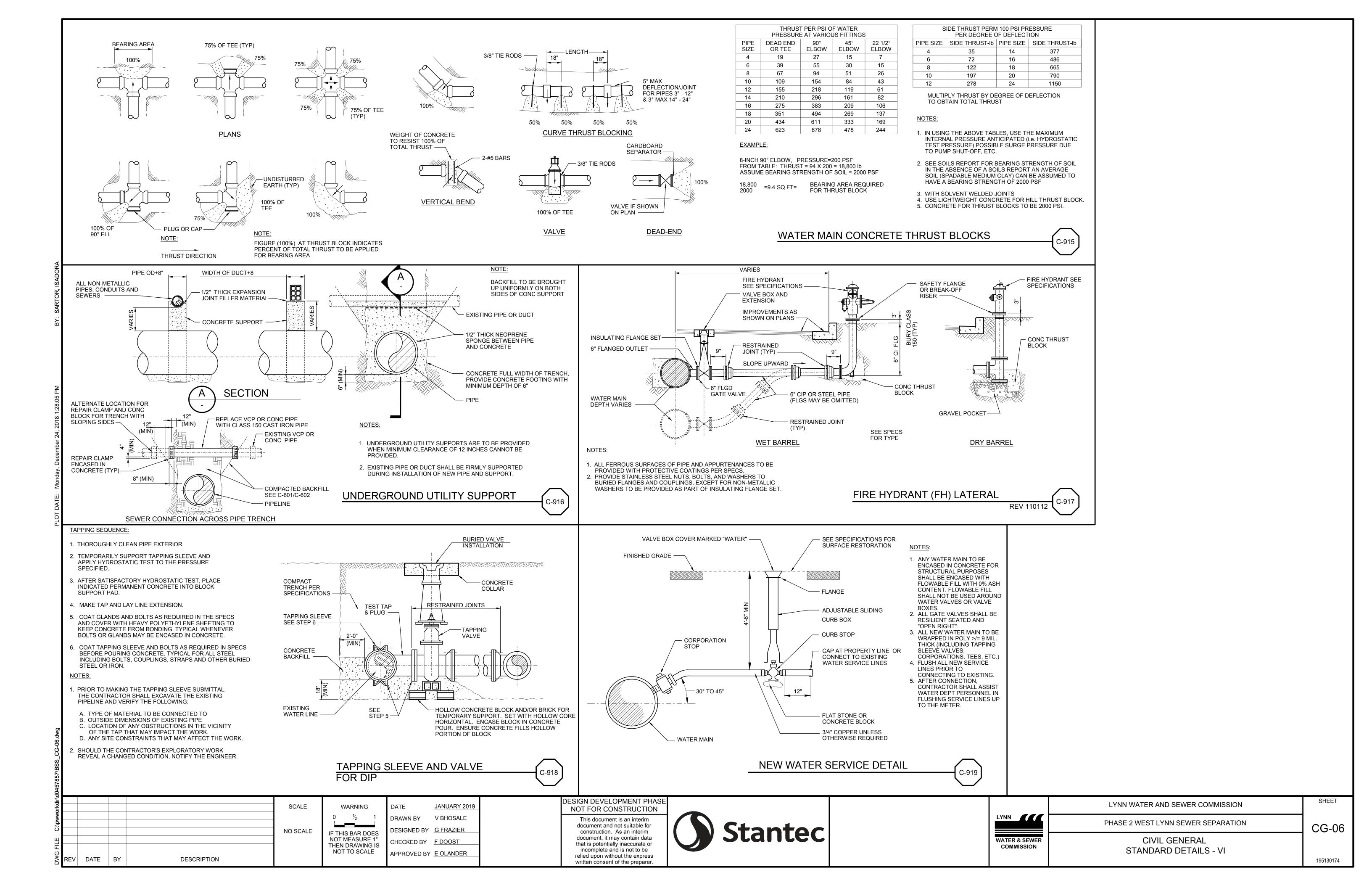
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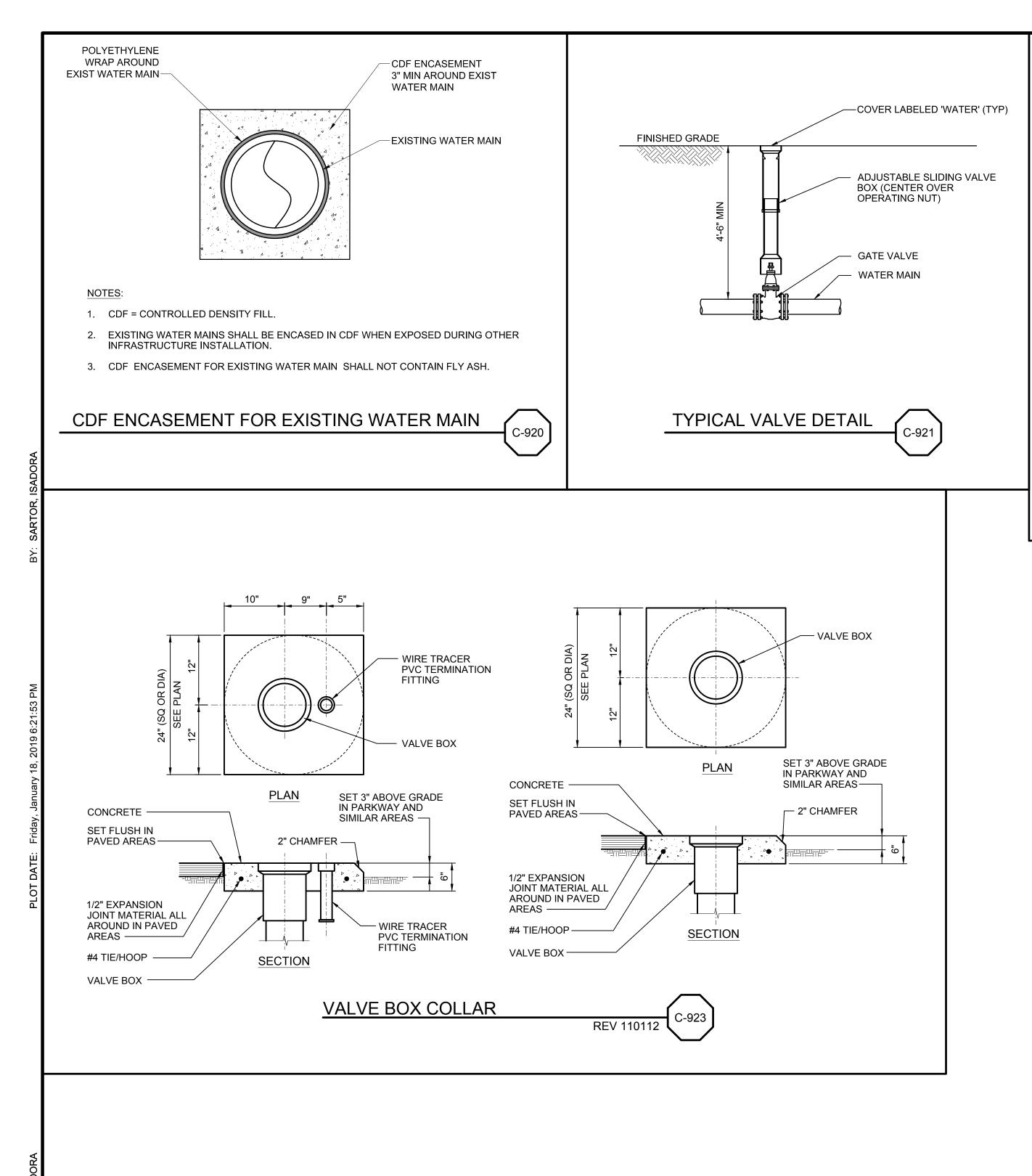
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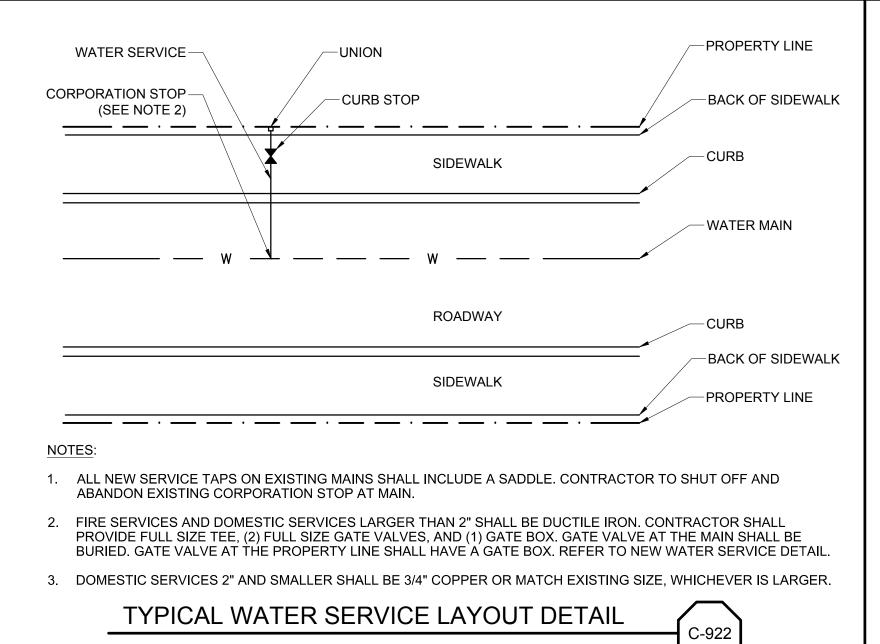
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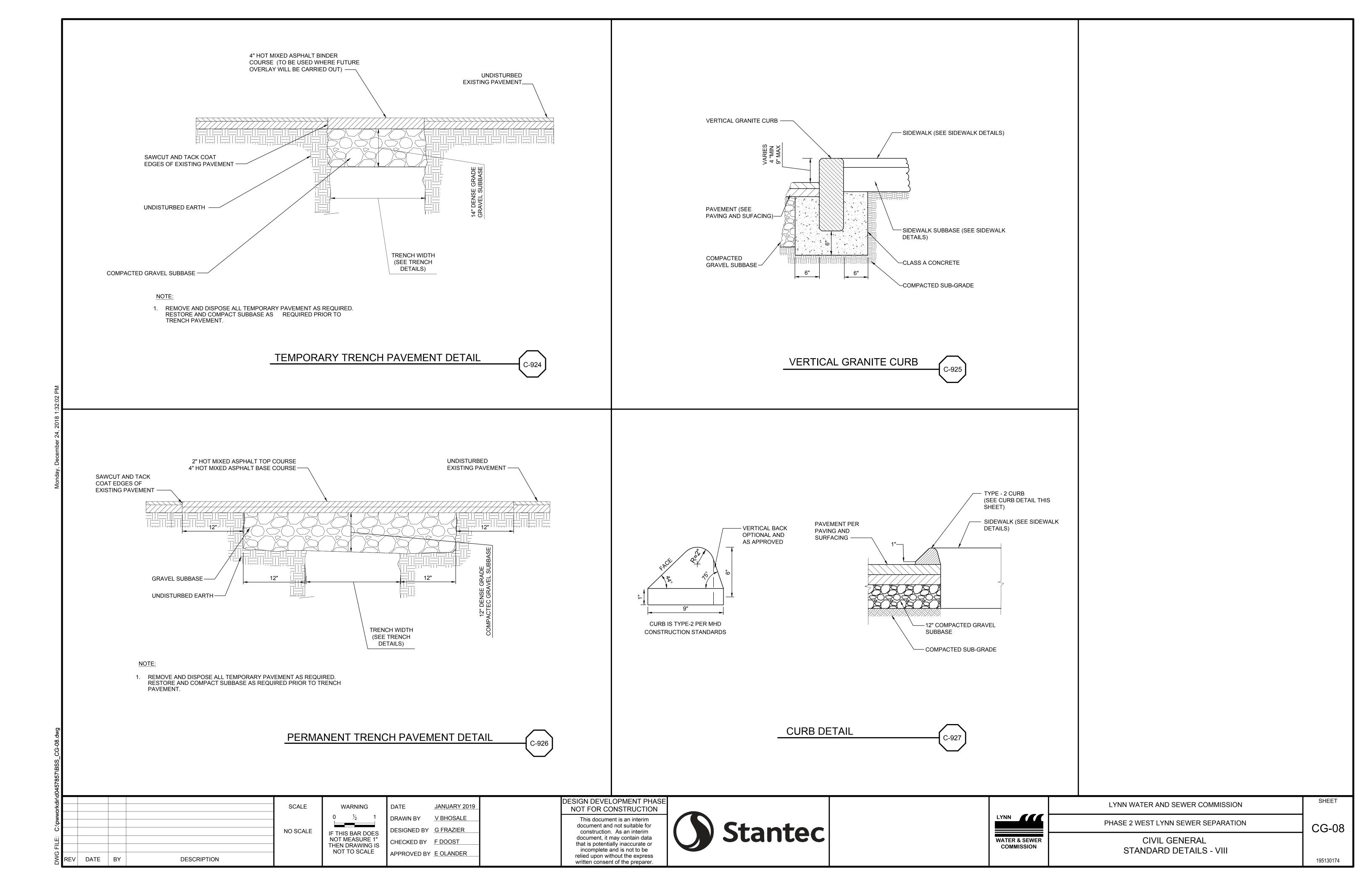


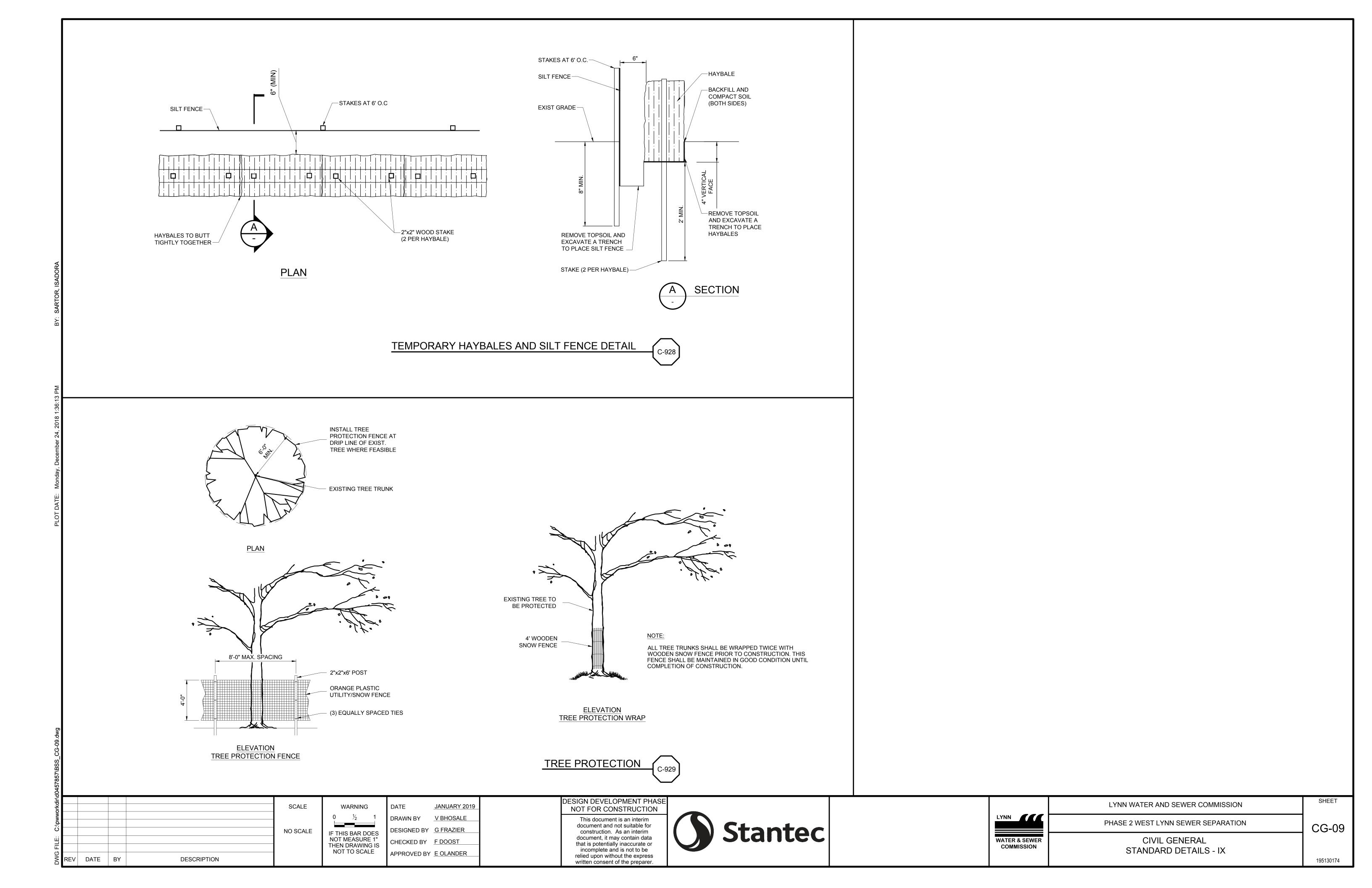


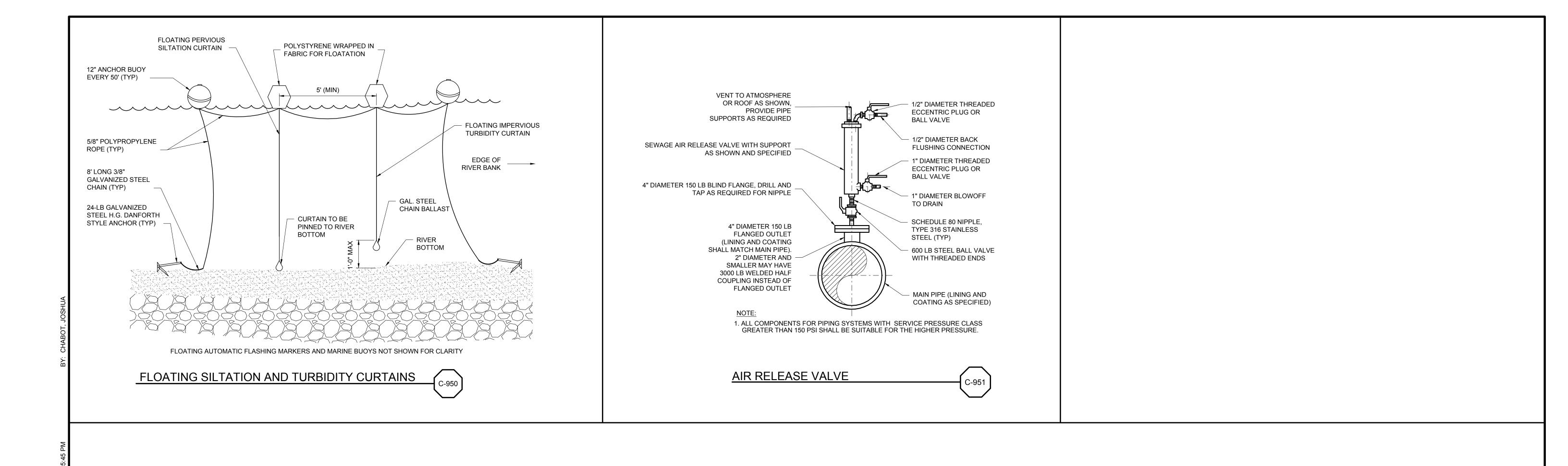
LYNN WATER AND SEWER COMMISSION

PHASE 2 WEST LYNN SEWER SEPARATION

CIVIL GENERAL
STANDARD DETAILS - VII







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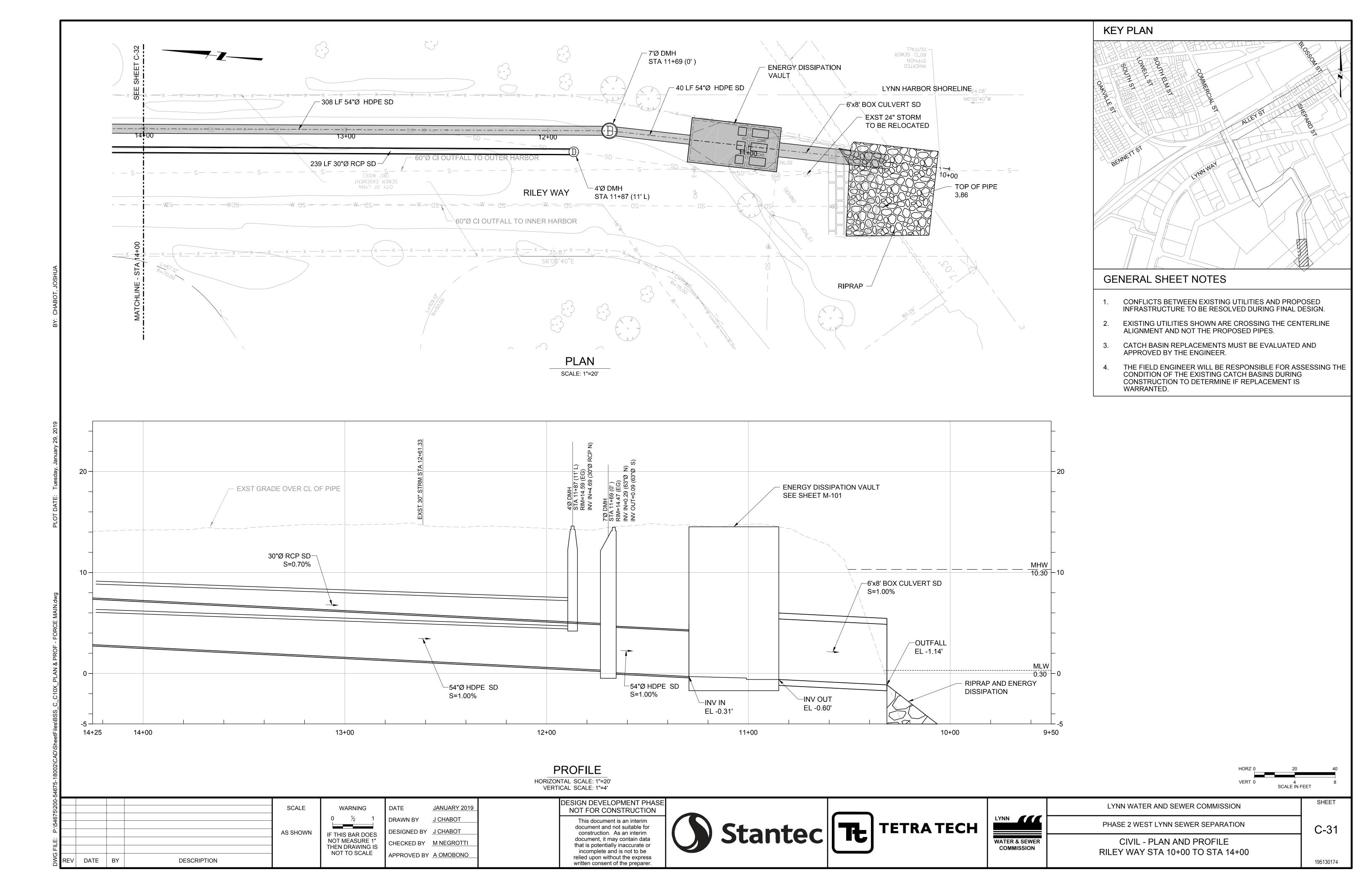


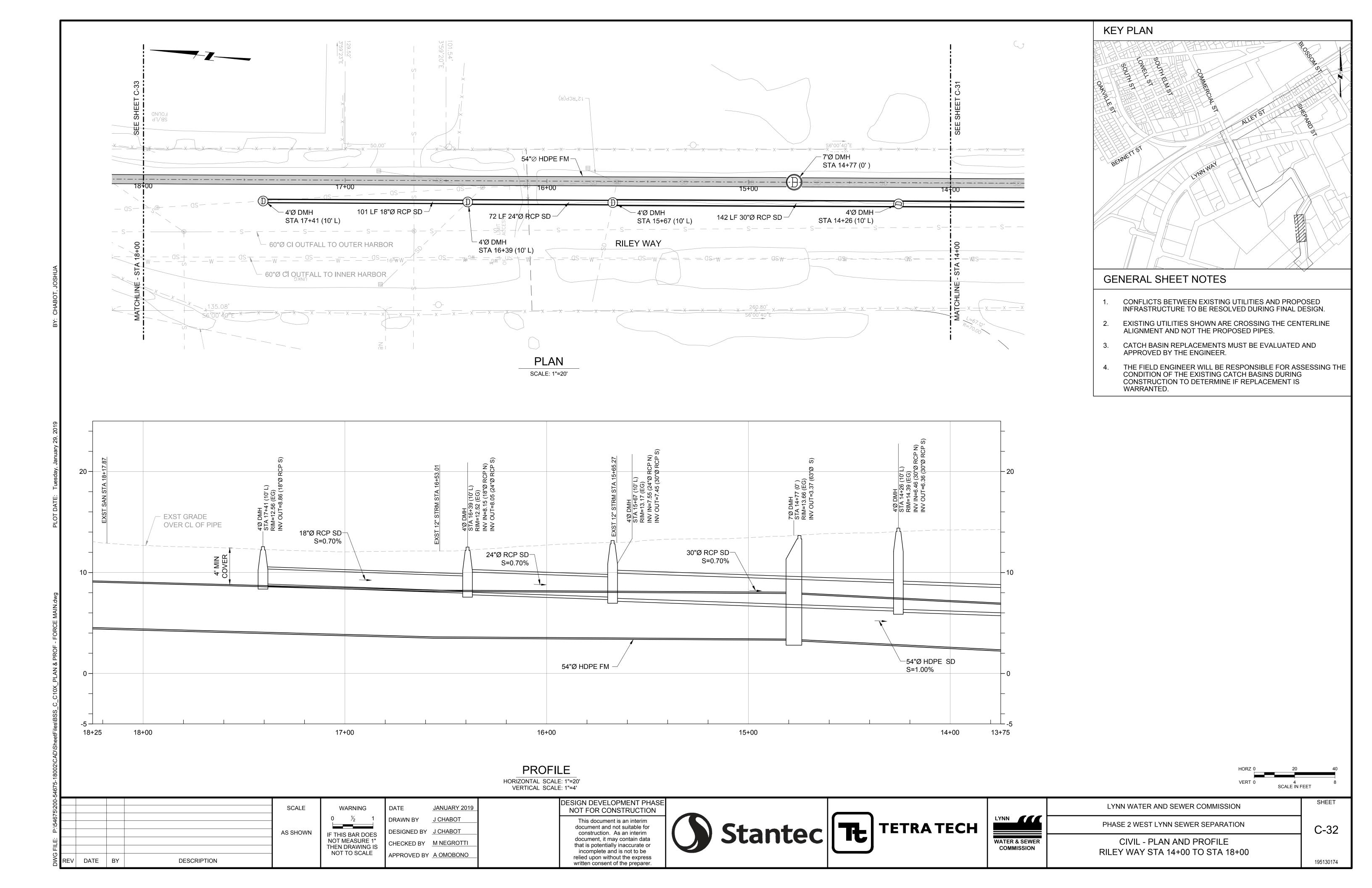


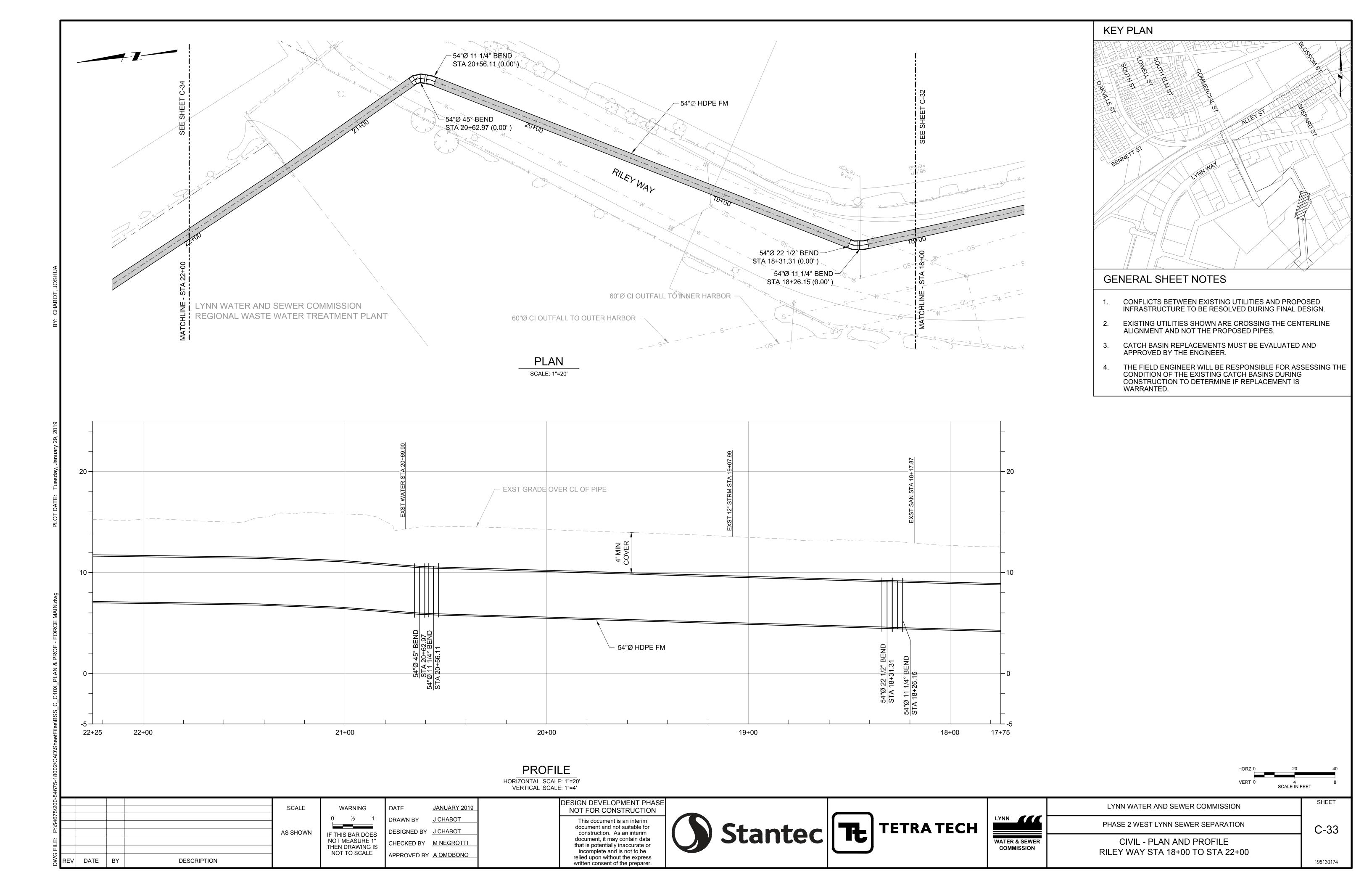
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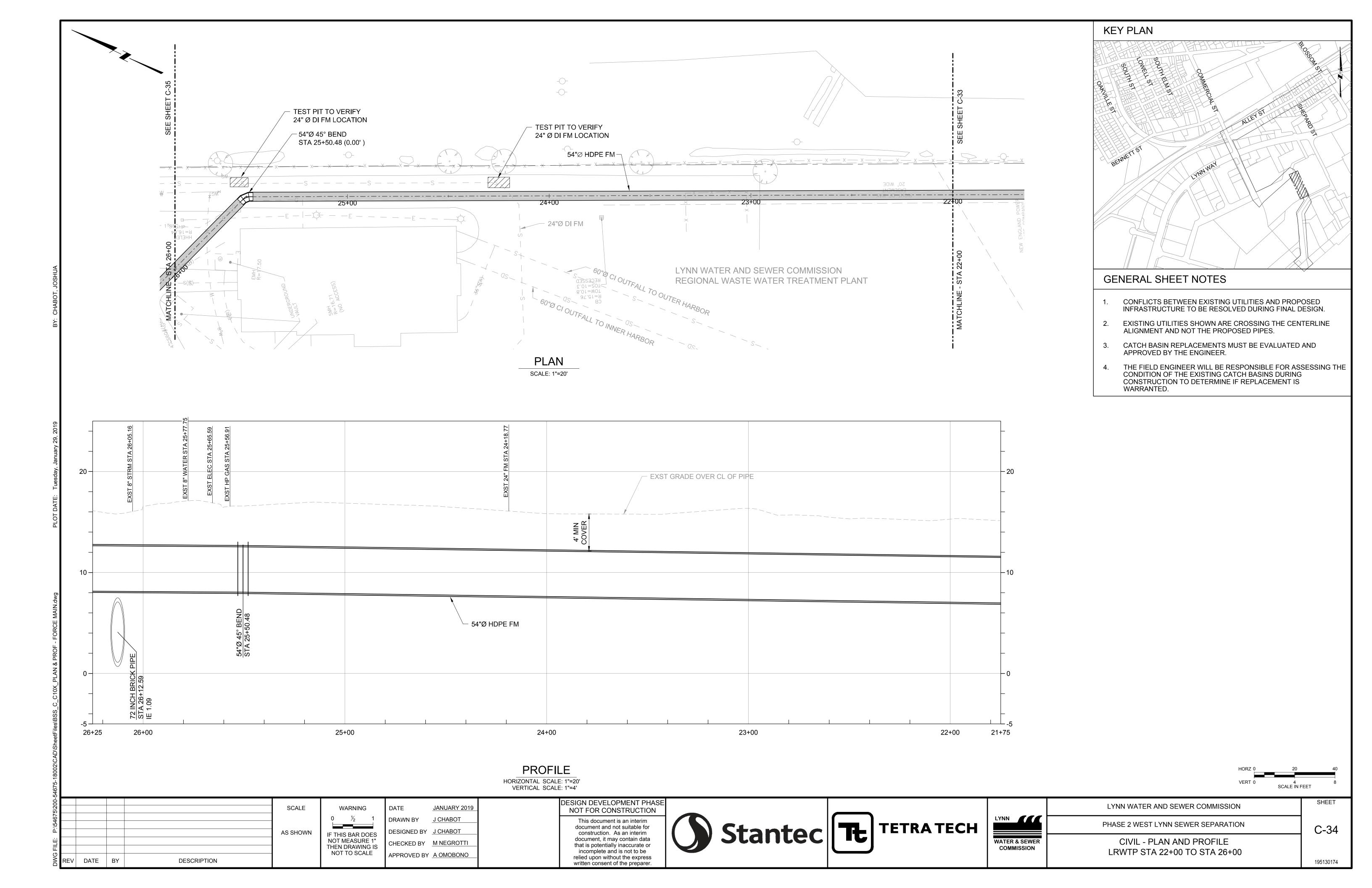
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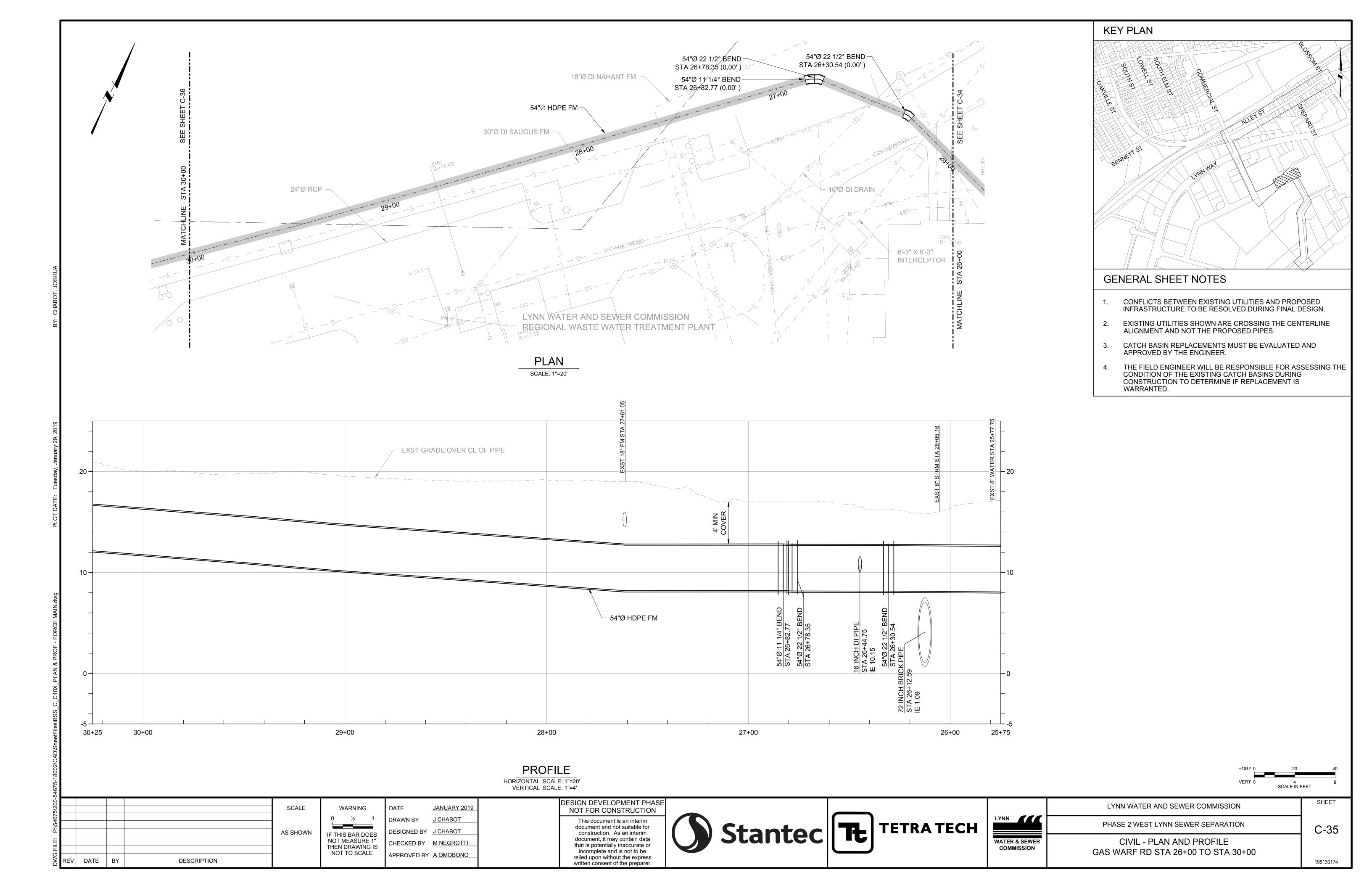
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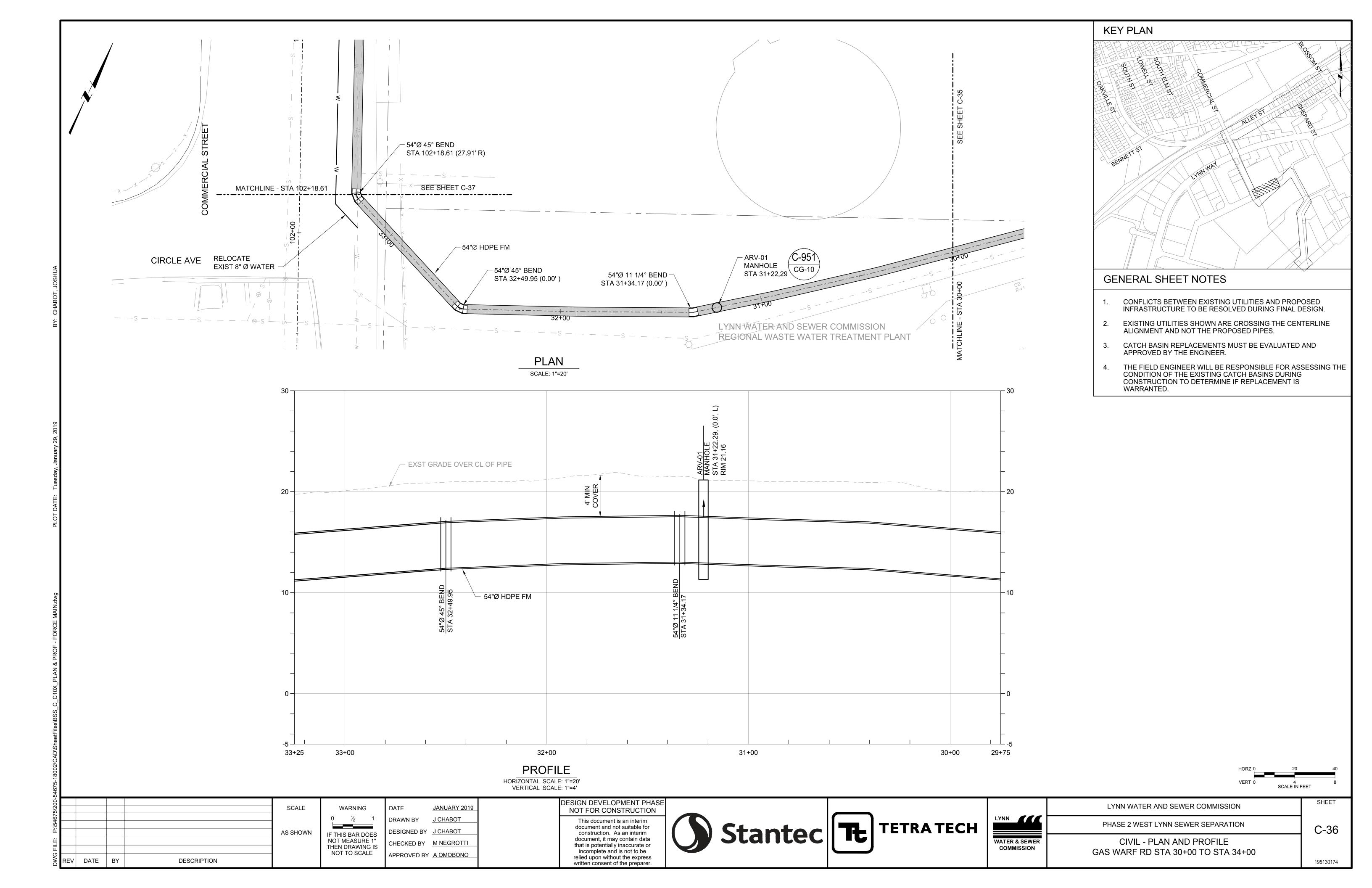


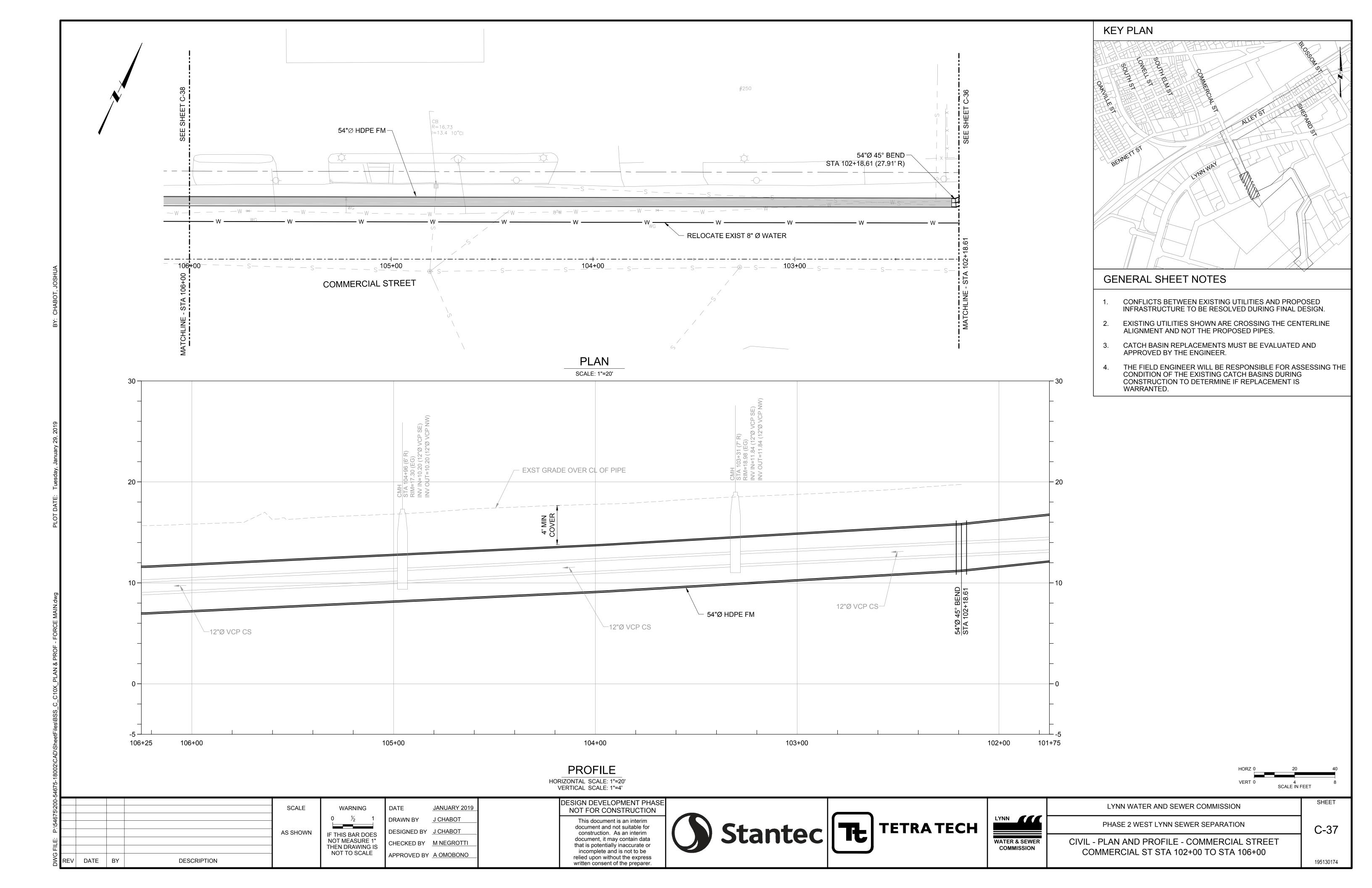


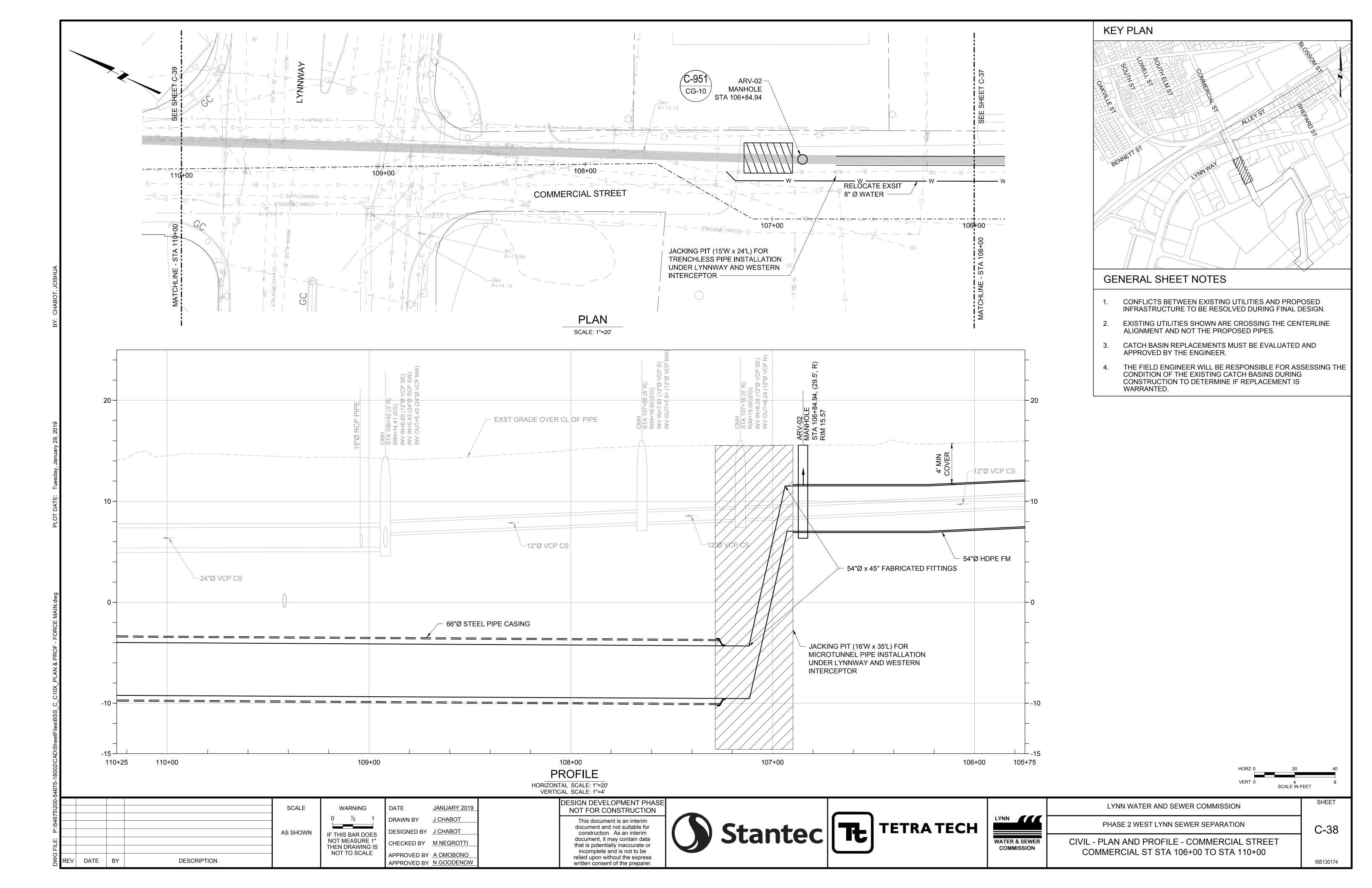


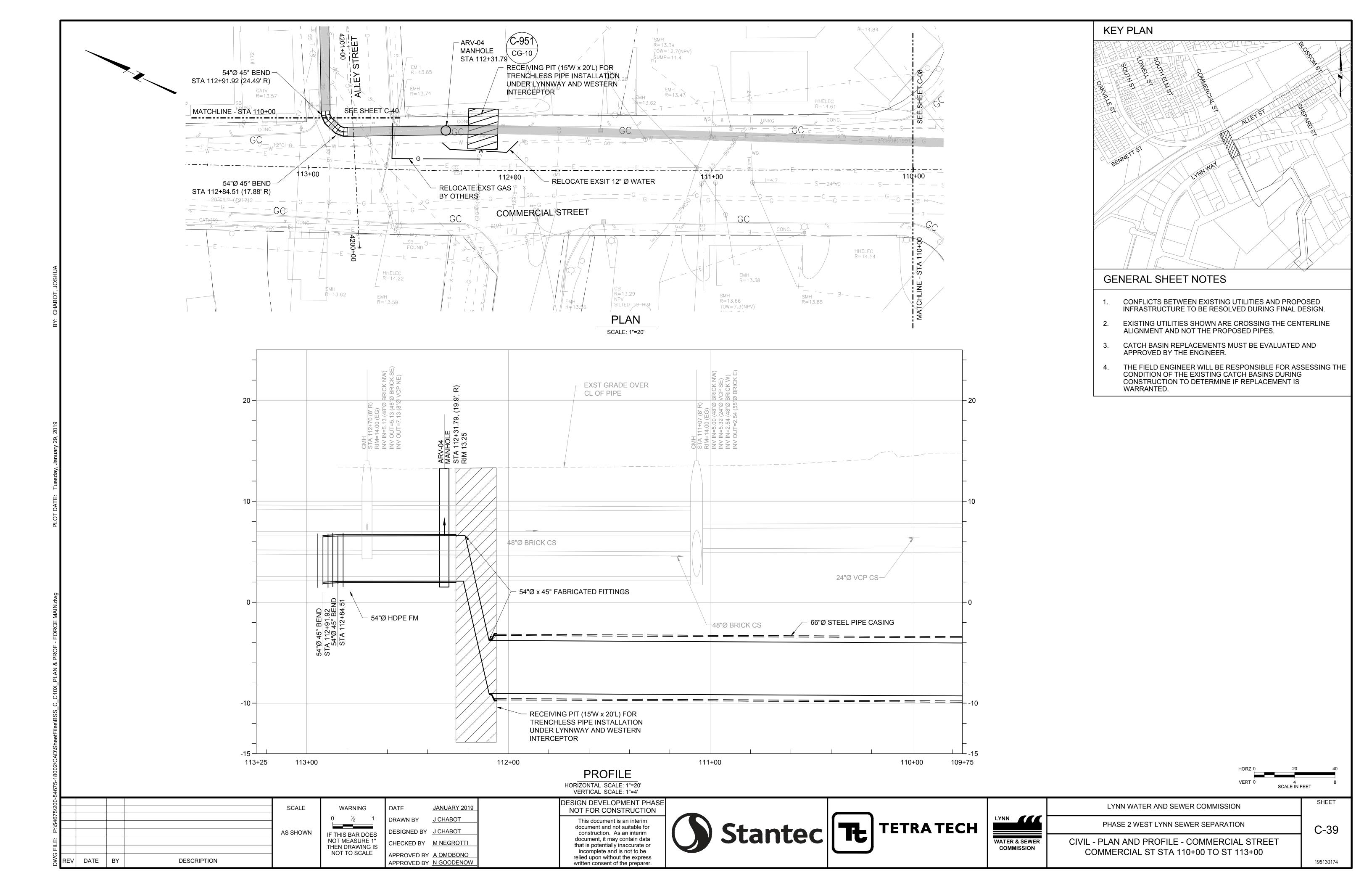


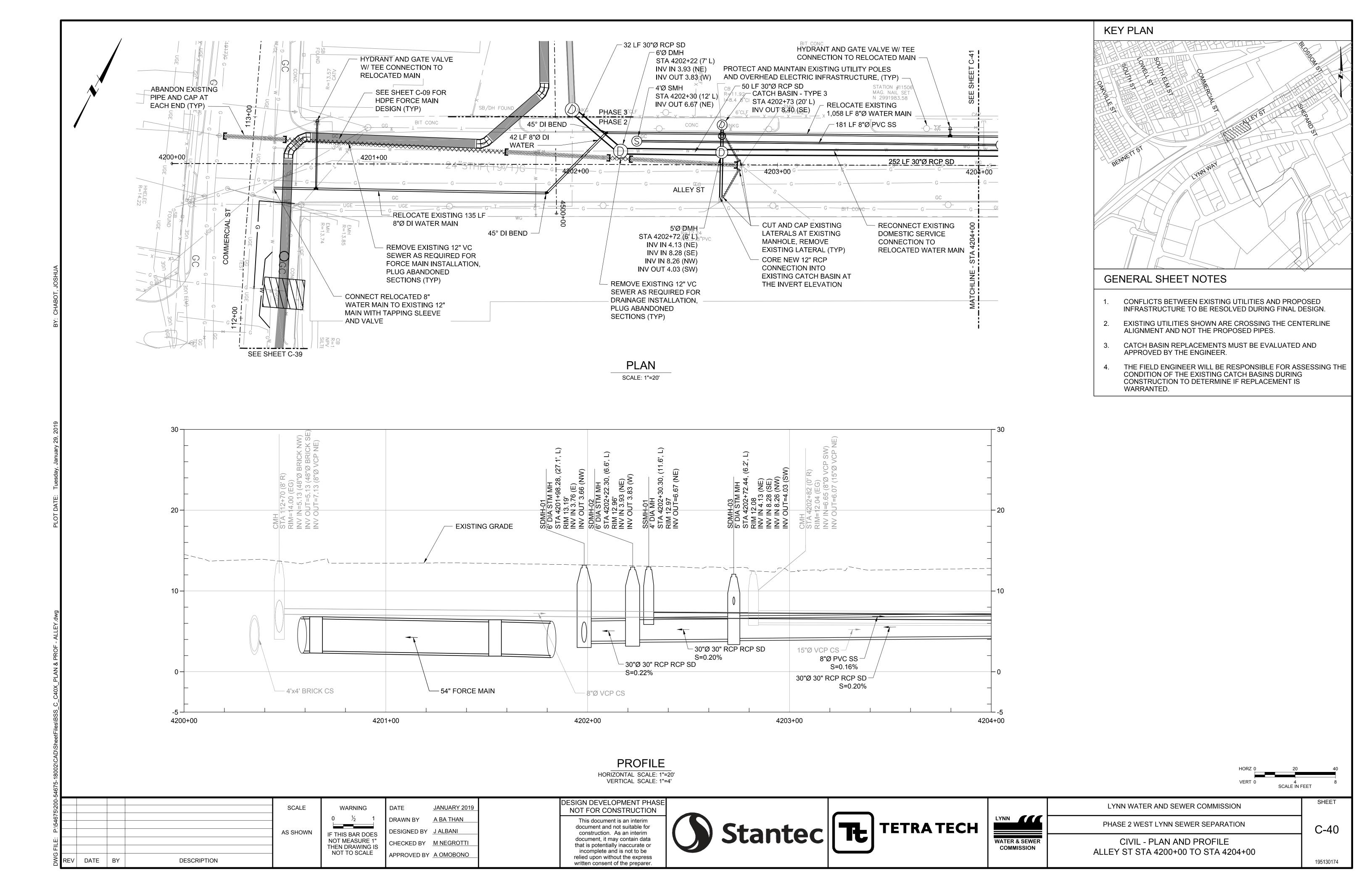


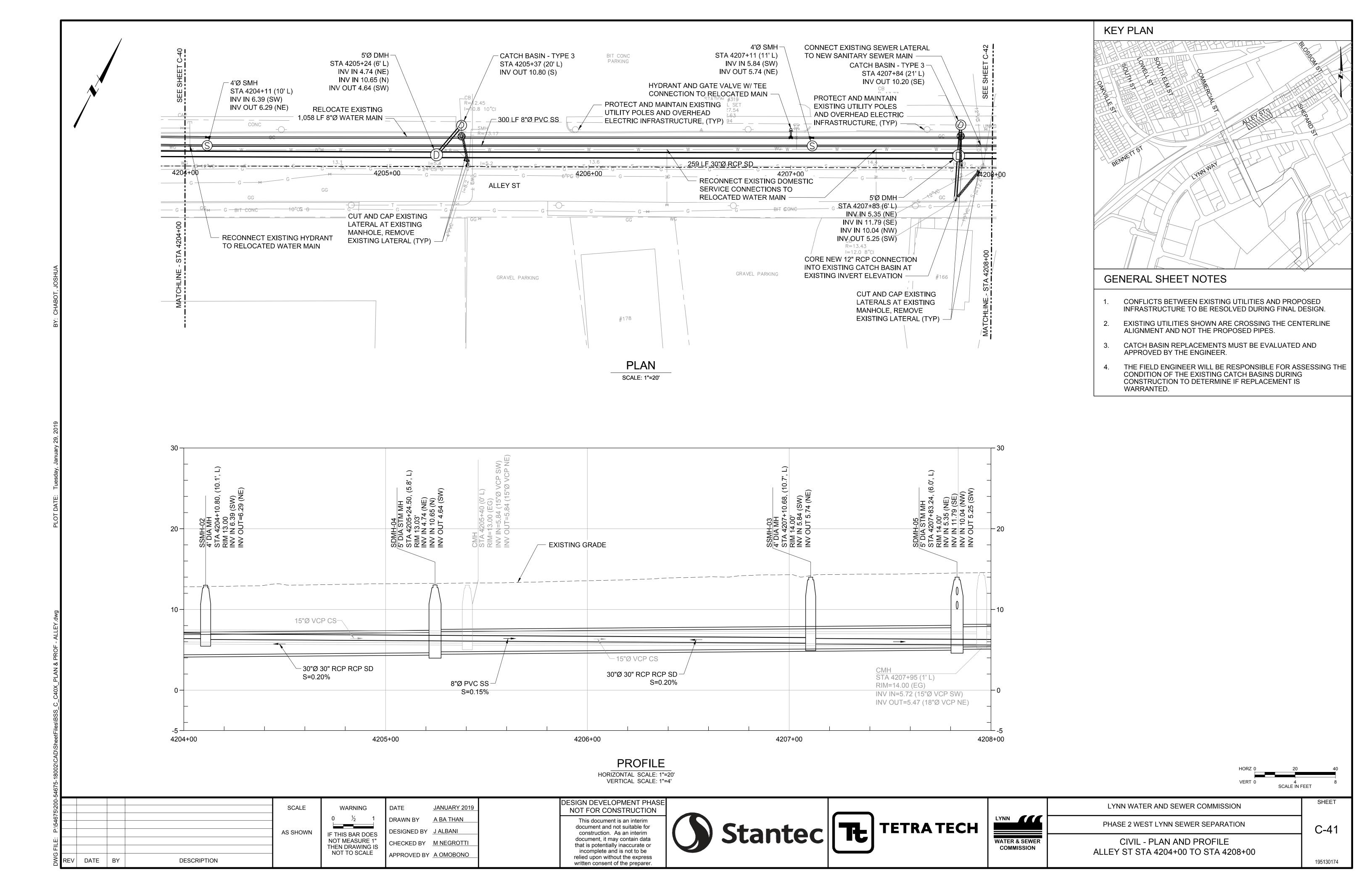


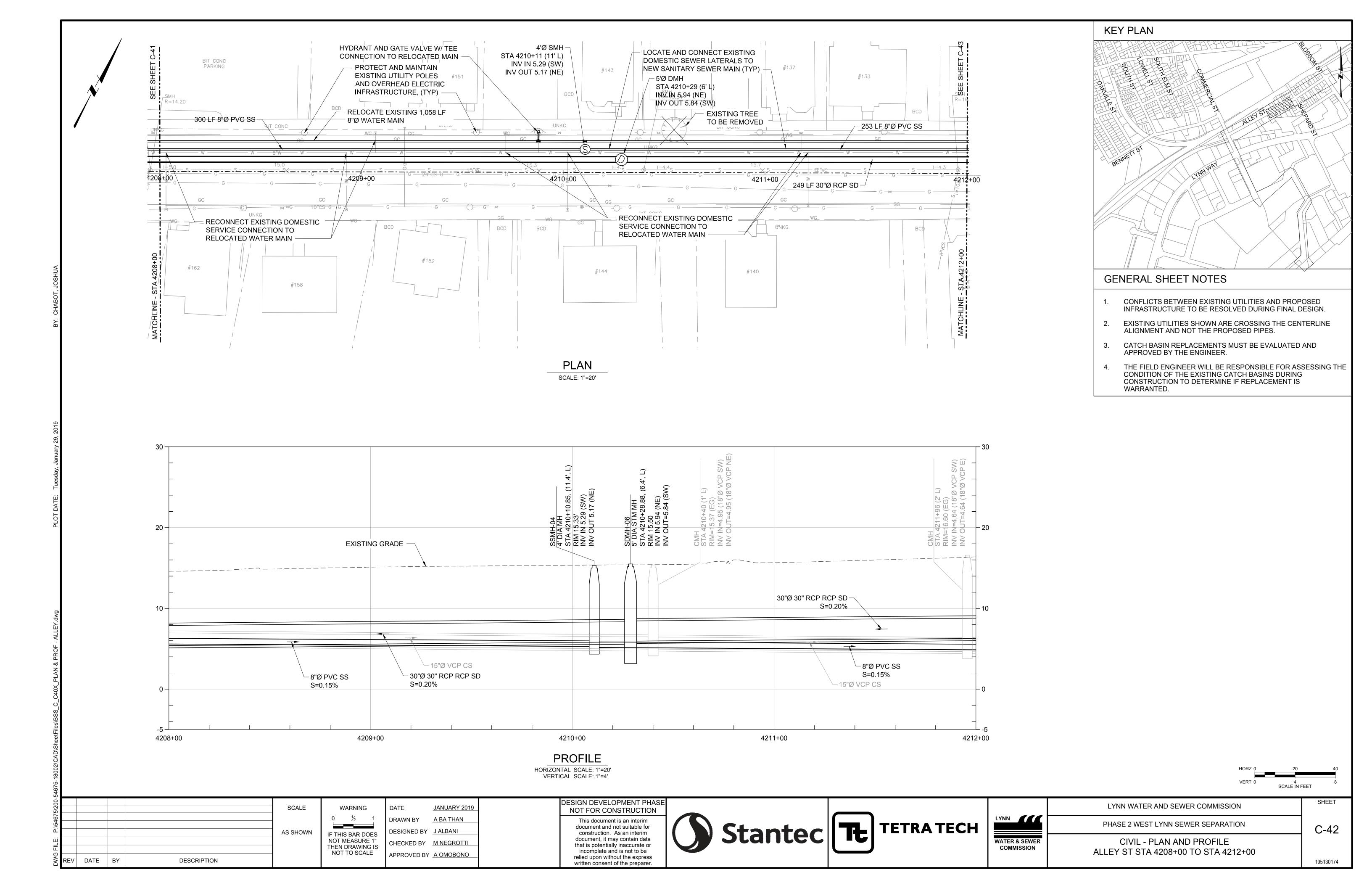


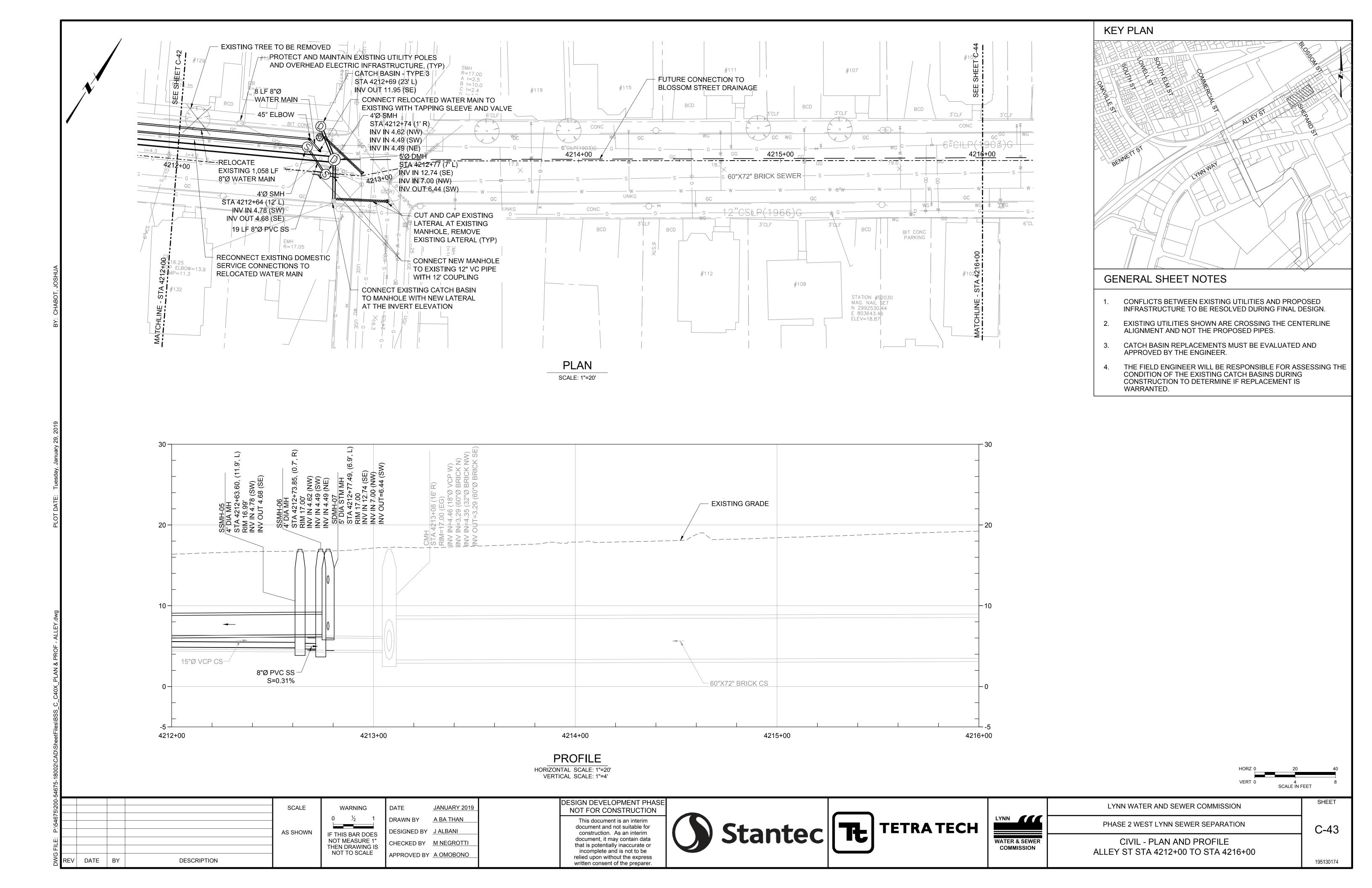


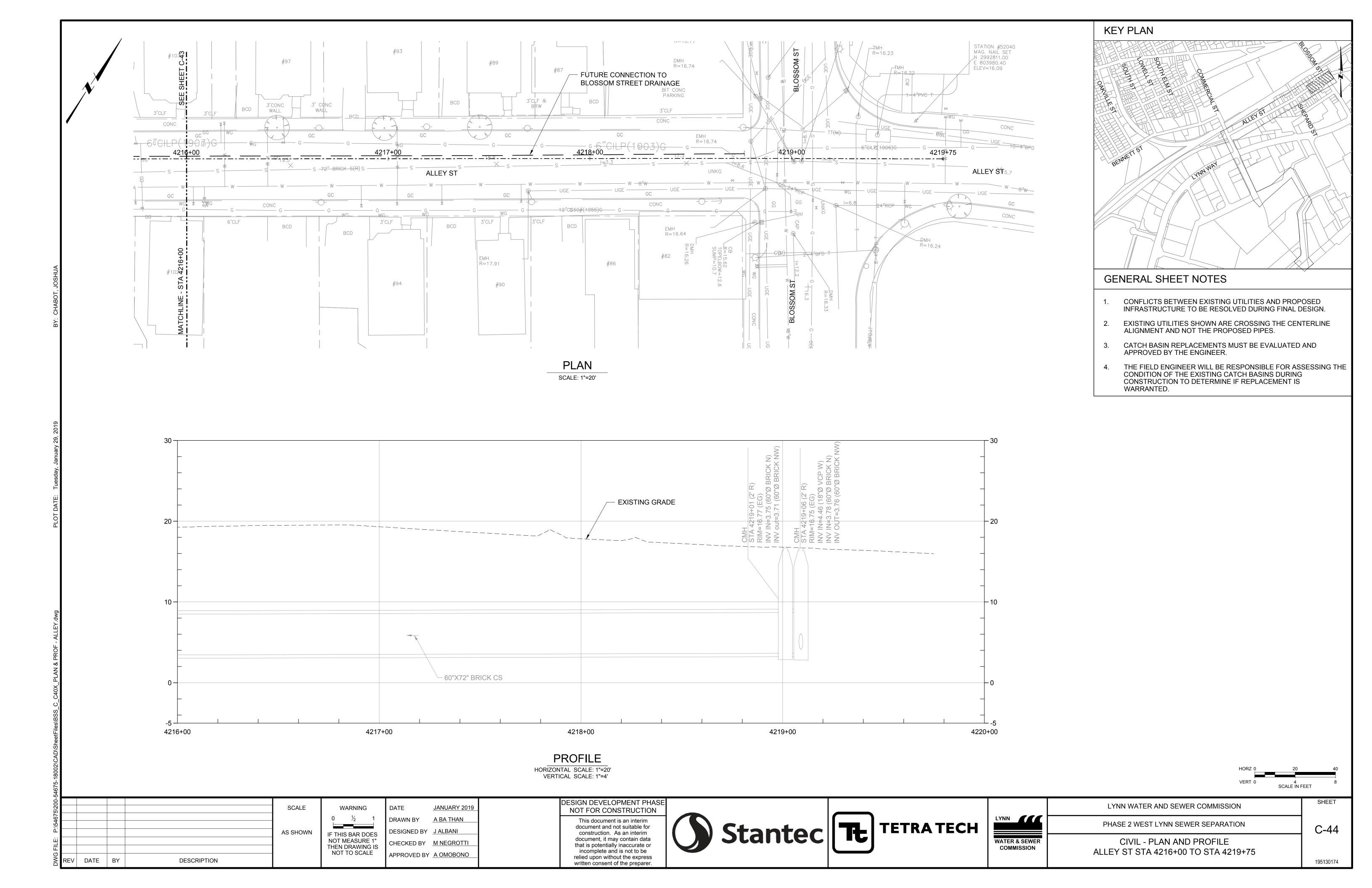


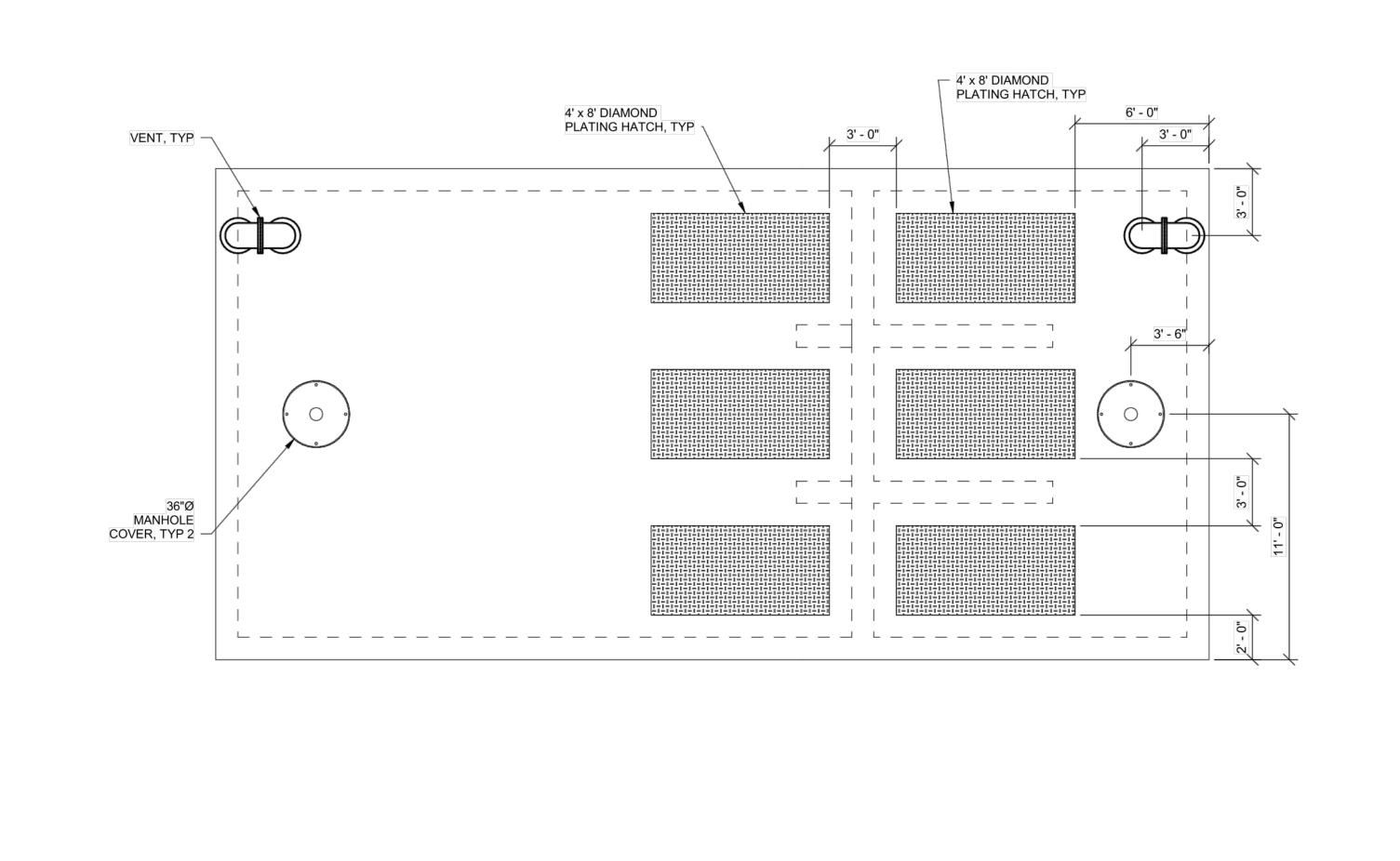


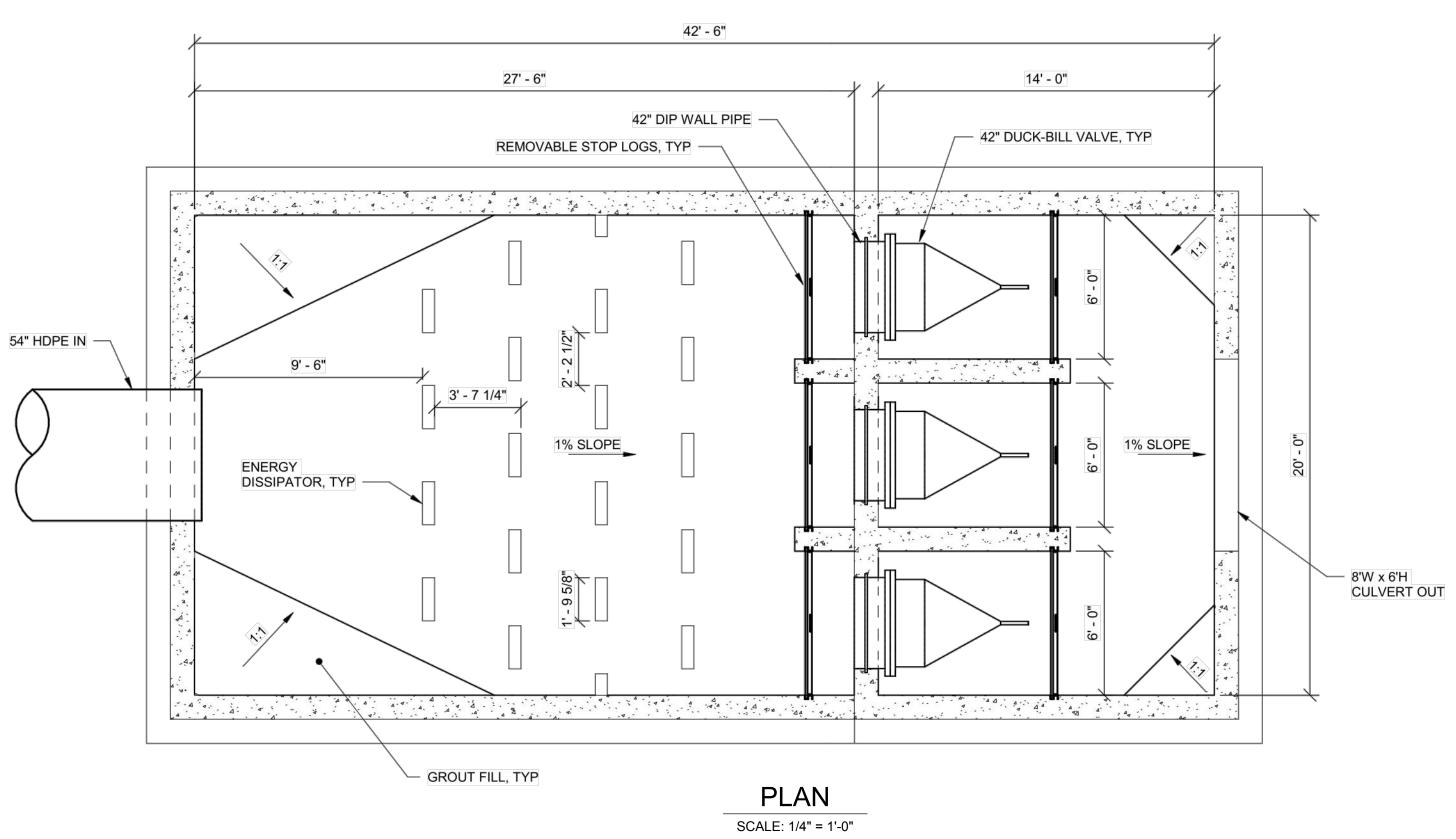




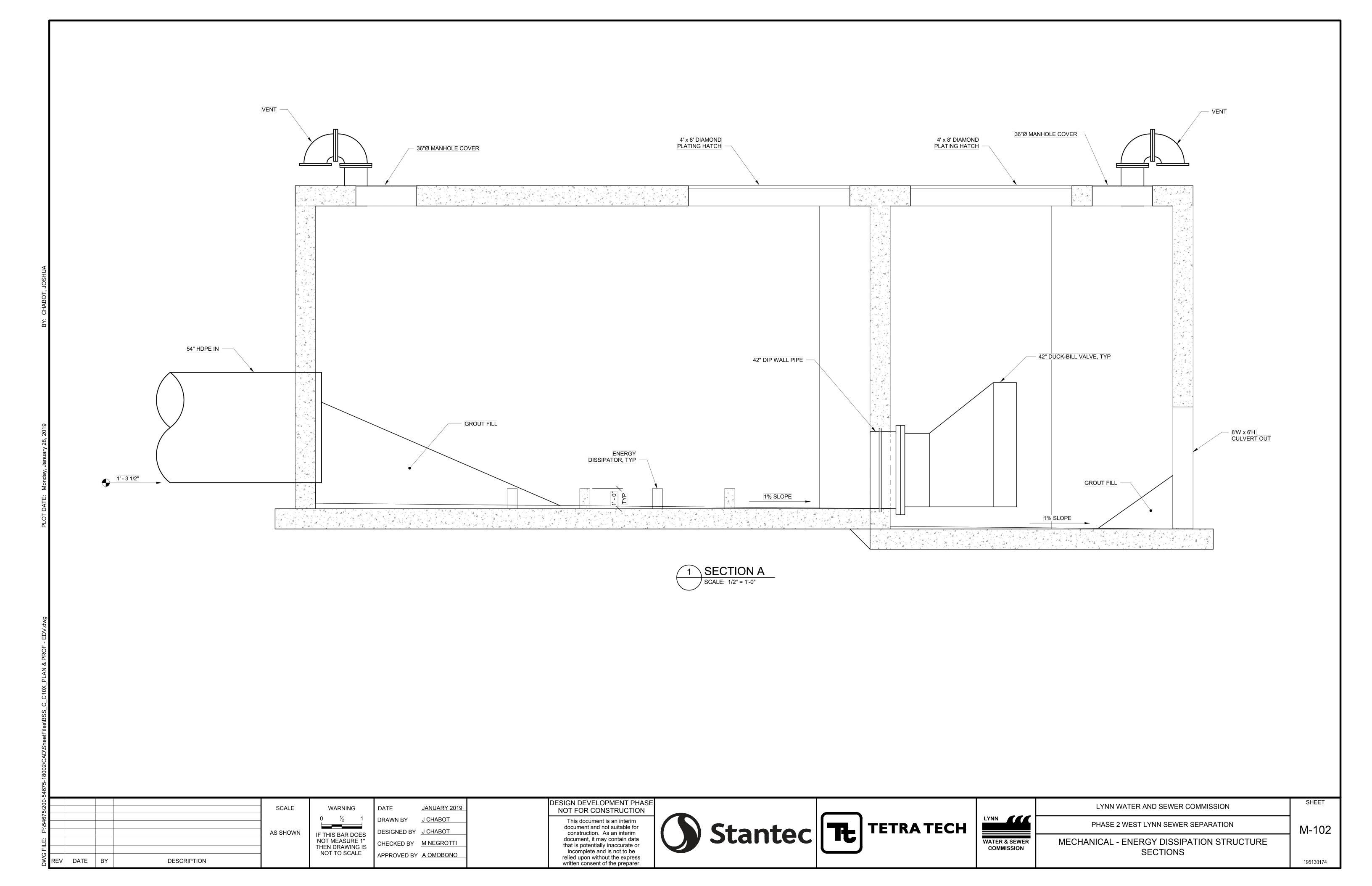


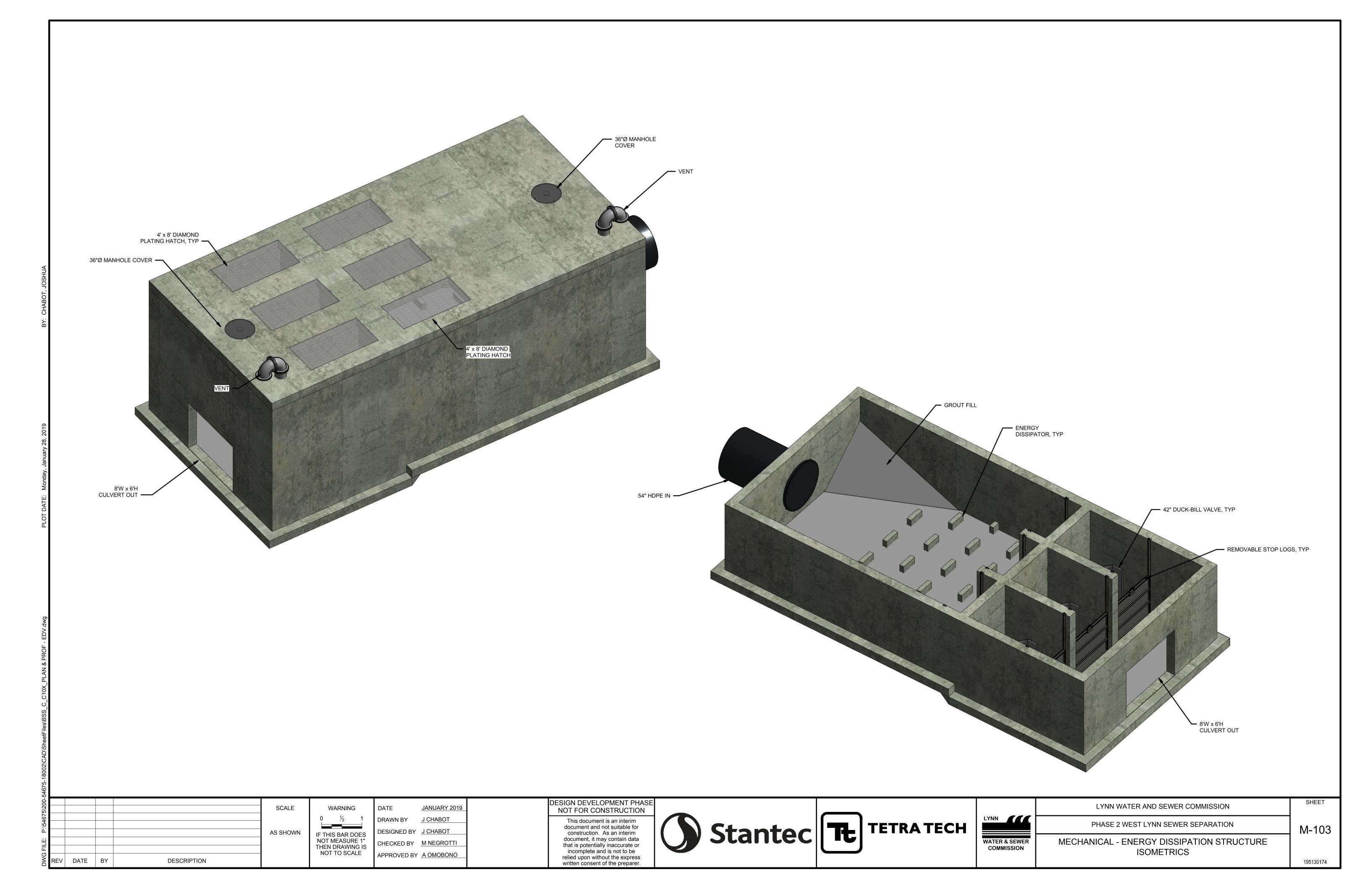






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### GENERAL NOTES:

- 1. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, UNLESS SUPERCEDED BY THESE PLANS.
- 2. ALL SIGN LEGENDS, BORDERS, AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
- 3. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES AND SAFETY DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
- 4. TEMPORARY CONSTRUCTION SIGNING, BARRICADES, AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- 5. SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES" AND/OR "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
- 6. THE CONTRACTOR SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
- 7. THE FIRST FIVE PLASTIC DRUMS OF A TAPER SHALL BE MOUNTED WITH TYPE A LIGHTS.
- 8. THE ADVISORY SPEED LIMIT. IF REQUIRED. SHALL BE DETERMINED BY THE ENGINEER.
- 9. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
- 10. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
- 11. MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
- 12. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
- 13. THE CONTRACTOR SHALL REFERENCE THE PROJECT SPECIFICATIONS REGARDING STREET SPECIFIC TIMES OF ALLOWABLE WORK ZONE OPERATIONS.
- 14. THE CONTRACTOR SHALL REFERENCE THE PART VI STANDARDS AND GUIDES FOR TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY AND INCIDENT MANAGEMENT OPERATIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) (LATEST EDITION). THE CONTRACTOR SHALL CONFORM TO THE MINIMUM REQUIREMENTS AS OUTLINED IN THIS DOCUMENT AND AS DETAILED IN THE PLANS.
- 15. AT LOCATIONS WHERE THE WORK ZONE REQUIRES A SERIES OF MUTCD DETAIL TREATMENTS IN COMBINATION (SEE PLANS), THE CONTRACTOR SHALL ONLY INSTALL THE REQUIRED ADVANCE WARNING SIGNING FOR THE APPROACH OF THE FIRST WORK ZONE IN SERIES UNLESS THE SECOND WORK ZONE IS MORE RESTRICTIVE. THE CONTRACTOR SHALL ALSO PROVIDE THE REQUIRED EXIT WORK ZONE SIGNING FOR THE LAST OF THE COMBINED WORK ZONES IN SERIES, SIGNING SHALL BE PROVIDED FOR THE AVAILABLE LENGTH THAT THE STREET WILL ACCOMMODATE.
- 16. AT CONSTRUCTION SIGN INSTALLATIONS AND/OR ATTACHMENTS TO BARRICADES DEVICES SHALL MEET THE MINIMUM REQUIREMENTS AS OUTLINED IN THE MUTCD PART VI STANDARD DOCUMENT SIGNS SHALL BE VISIBLE AND INSTALLED SECURELY TO EITHER AN EXISTING SIGN POLE CAPABLE OF SUPPORTING THE WEIGHT OF THE SIGN TO BE POSTED (WITH THE APPROVAL THE CITY OF LYNN), OR TO A TEMPORARY BARRICADE DEVICE WHICH WILL NOT BE SUSCEPTIBLE TO WIND.
- 17. ALL WORK ZONES SHALL BE EFFECTIVELY PROTECTED AND CORDONED OFF FROM OFF-TIME ACCESS BY VEHICLES AND PEDESTRIANS. NO OPEN HOLE TRENCHES WILL BE ALLOWED AT THE END OF A WORK DAY, SUCH LOCATIONS WILL REQUIRE STEEL PLATING INSTALLED FLUSH WITH THE EXISTING GROUND SURFACE TO AVOID CREATING EITHER A TRIPPING HAZARD OR A VIOLATION TO ADA STANDARDS.
- 18. CONTRACTOR SHALL REFERENCE THE PROJECT SPECIFICATIONS REGARDING THOSE STREETS ALLOWING ABUTTER ACCESS ONLY. THE CONTRACTOR MUST NOTIFY LYNN FIRE, POLICE AND EMS 48 HOURS IN ADVANCE OF WORK ZONE LOCATIONS, DURATION OF ACTIVITY AND OF ANY DETOURS OR CLOSURES THAT MAY RESULT.
- 19. THE CONTRACTOR SHALL PROVIDE ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES.
- 20. THE CONTRACTOR SHALL ESTABLISH A SIDEWALK DETOUR PLAN PRIOR TO CONSTRUCTION THAT SAFELY CONVEYS PEDESTRIANS ACROSS THE INTERSECTIONS. THE DETOUR ROUTE SHALL BE LOCATED TO PROVIDE ADEQUATE SIGHT DISTANCES OF ONCOMING VEHICLE FROM EVERY DIRECTION AND SAFE PASSAGE FOR PEDESTRIANS.
- 21. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW A PLAN FOR ACCOMMODATING THE VEHICULAR AND PEDESTRIAN TRAFFIC ASSOCIATED WITH THE BUSINESSES AFFECTED BY THE WORK. THE CONTRACTOR MUST COORDINATE WITH THE BUILDING OWNER PRIOR TO PERFORMING ACTIVITIES WHICH WILL IMPACT BUSINESSES IN THE AREA, INCLUDING LOADING DOCKS, PARKING LOTS AND GARAGES THAT SERVE LOCAL BUSINESSES. A MINIMUM 4 FT WIDE SIDEWALK SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION WHERE APPLICABLE.

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- 22. IF THE CONTRACTOR OBSTRUCTS ANY SIDEWALK WITHIN THE WORK ZONE, SIGNING SHALL BE POSTED WARNING PEDESTRIANS THAT THE SIDEWALK IS CLOSED.
- 23. PEDESTRIANS SHOULD BE PROVIDED WITH A SAFE, CONVENIENT TRAVEL PATH THAT REPLICATES AS NEARLY AS POSSIBLE THE MOST REQUIRED CHARACTERISTICS OF SIDEWALKS OR FOOTPATHS.
- 24. PEDESTRIAN ACCESS TO LOCAL BUSINESSES AND OTHER BUILDINGS SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL REFERENCE THE PROJECT SPECIFICATIONS.
- 25. THE CONTRACTOR MUST COORDINATE WITH AND PROVIDE 48 HOURS ADVANCE NOTICE TO THE PUBLIC TRANSIT AUTHORITY REGARDING RELOCATION OF EXISTING BUS STOPS TO TEMPORARY OR ALTERNATIVE LOCATIONS. RELOCATED BUS STOPS WILL BE TEMPORARILY SIGNED TO CLEARLY IDENTIFY THE TEMPORARY PICKUP/DROP OFF LOCATION DURING CONSTRUCTION.
- 26. THE CONTRACTOR SHALL BE AWARE OF EXISTING LOADING ZONES WITHIN THE WORK ZONE. ALTHOUGH THESE LOADING ZONES MAY NOT BE MAINTAINED DURING CONSTRUCTION, THE CONTRACTOR MUST COORDINATE WITH ALL COMMERCIAL BUSINESSES REGARDING THEIR DELIVERY VEHICLE SCHEDULE TO BEST ACCOMMODATE VEHICLE ACCESS DURING CONSTRUCTION.
- 27. THE CONTRACTOR SHALL IMPLEMENT ALL MEASURES NECESSARY TO CONSTRUCT UTILITIES WITHOUT DISTURBING EXISTING DRIVEWAYS AND SHALL MAINTAIN UNINTERRUPTED ACCESS/EGRESS TO EXISTING DRIVEWAYS DURING ALL PHASES OF CONSTRUCTION.
- 28. LANE RESTRICTIONS MAY NOT REMAIN OVERNIGHT, DRUMS SHALL BE PLACED OFF THE EDGE OF PAVEMENT DURING NON-WORK HOURS.
- 29. NO TRAFFIC CONTROL DEVICES SHALL REMAIN ON THE ROADWAY AT THE END OF EACH WORKDAY, COVER SIGNS AS NECESSARY WHEN NOT IN USE.
- 30. ALL WARNING SIGNS SHALL BE BLACK LEGEND ON A REFLECTIVE ORANGE BACKGROUND.
- 31. ALL DRUMS SHALL BE PLACED APPROPRIATELY OR MOVED AS NECESSARY TO MAINTAIN ADEQUATE ABUTTER ACCESS AT ALL TIMES.
- 32. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF LYNN POLICE DEPARTMENT ON POSTING 'NO PARKING' SIGNS.
- 33. ALL SIGNS NOT APPLICABLE TO THE CURRENT TRAFFIC SETUP SHALL BE REMOVED OR COVERED.
- 34. THE CONTRACTOR SHALL COVER ALL CONFLICTING PAVEMENT MARKINGS WITH PREFORMED BLACK LINE MASK PAVEMENT MARKING TAPE OR REMOVE BY AN APPROVED METHOD.
- 35. UPON COMPLETION OF THE PERMANENT PAVEMENT REPAIRS, THE CONTRACTOR SHALL FURNISH AND INSTALL PERMANENT PAVEMENT MARKINGS (I.E., CENTERLINES, LANE LINES, STOP BARS, CROSSWALKS, ETC.) OF THE SAME SIZE AND TYPE WHICH EXISTED PRIOR TO THE CONTRACTOR'S ACTIVITIES.
- 36. THE CONTRACTOR SHALL MAINTAIN TRAFFIC SIGNALS AT ALL TIMES.
- 37. THE CONTRACTOR SHALL RREPLACE TRAFFIC DETECTOR LOOPS WHERE EXISTING LOOPS ARE REMOVED OR DAMAGED DURING CONSTRUCTION.
- 38. A LONGITUDINAL BUFFER SPACE SHALL BE UTILIZED IN ADVANCE OF WORK AREAS. SEE THE LATEST EDITION OF THE MUTCD PART VI. FOR GUIDELINES AND DETAILS.
- 39. CONTRACTOR MUST MAINTAIN A MINIMUM TRAVEL LANE OPEN AT ALL TIMES AS SHOWN ON THE PLANS.
- 40. TEMPORARY TRAFFIC CONTROL SIGN LOCATIONS AND ROADWAY TAPER LENGTHS SHALL BE BASED ON THE ROAD TYPE AND SPEED LIMITS.

### SUGGESTED WORK ZONE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS **			
ROAD TIFE	А	В	С	
LOCAL OR LOW VOLUME ROADWAYS*	350	350	350	
MOST OTHER ROADWAYS*	500	500	500	
FREEWAYS AND EXPRESSWAYS*	1,000	1,500	2,640	

\* ROAD TYPE TO BE DETERMINED BY THE RESIDENT ENGINEER

DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCP SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20-1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (i.e. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY-TO-DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

R2-10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

R2-10a, R2-10e, AND W20-1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

Based on: Table 6C-1 MUTCD LATEST EDITION

### STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED

SPEED*	DISTANCE
(mph)	(ft)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

\*POSTED SPEED, OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED

THESE VALUES MAY BE USED TO DETERMINE THE LENGTH OF LONGITUDINAL BUFFER SPACES.

THE DISTANCES IN THE ABOVE CHART REPRESENT THE MINIMAL VALUES FOR BUFFER

Source: Table 6C-2 MUTCD LATEST EDITION

### LEGEND:

 REFLECTORIZED PLASTIC DRUM OR 36" CONE

P/F POLICE/FLAGGER DETAIL

TYPE III BARRICADE

CHANGEABLE MESSAGE SIGN ARROW BOARD

WORK ZONE

├── WORK VEHICLE DIRECTION OF TRAFFIC

MEDIAN BARRIER WITH WARNING LIGHTS

TRUCK MOUNTED ATTENUATOR

SHEET

**TG-01** 

195130174

TRAFFIC OR PEDESTRIAN SIGNAL \_\_\_ SIGN

☐ MEDIAN BARRIER

REV DATE BY DESCRIPTION

WARNING IF THIS BAR DOES **NOT MEASURE 1'** THEN DRAWING IS NOT TO SCALE

DATE JAN 2019 DRAWN BY D HUDSON DESIGNED BY D HUDSON CHECKED BY E MAKI APPROVED BY

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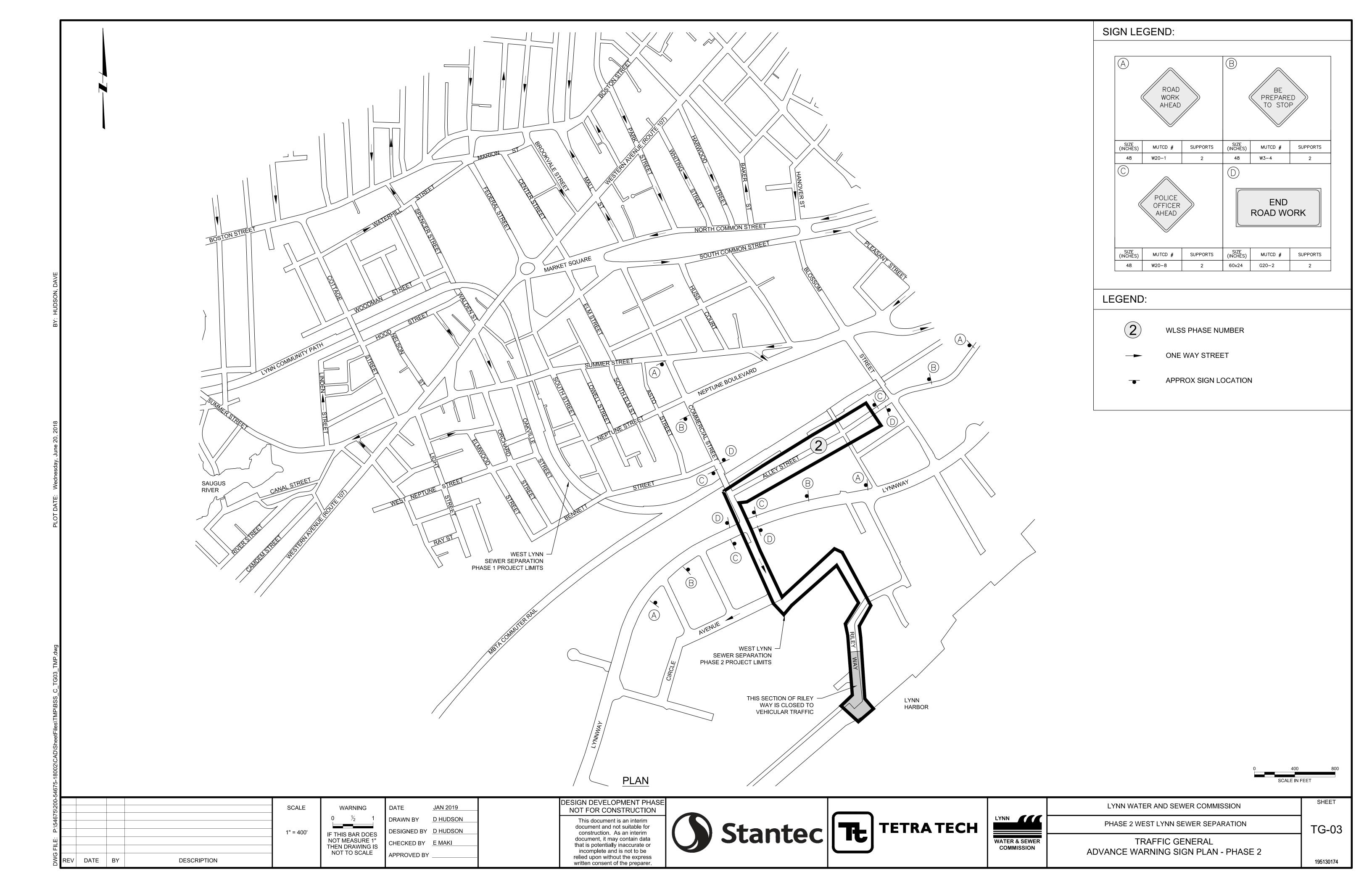
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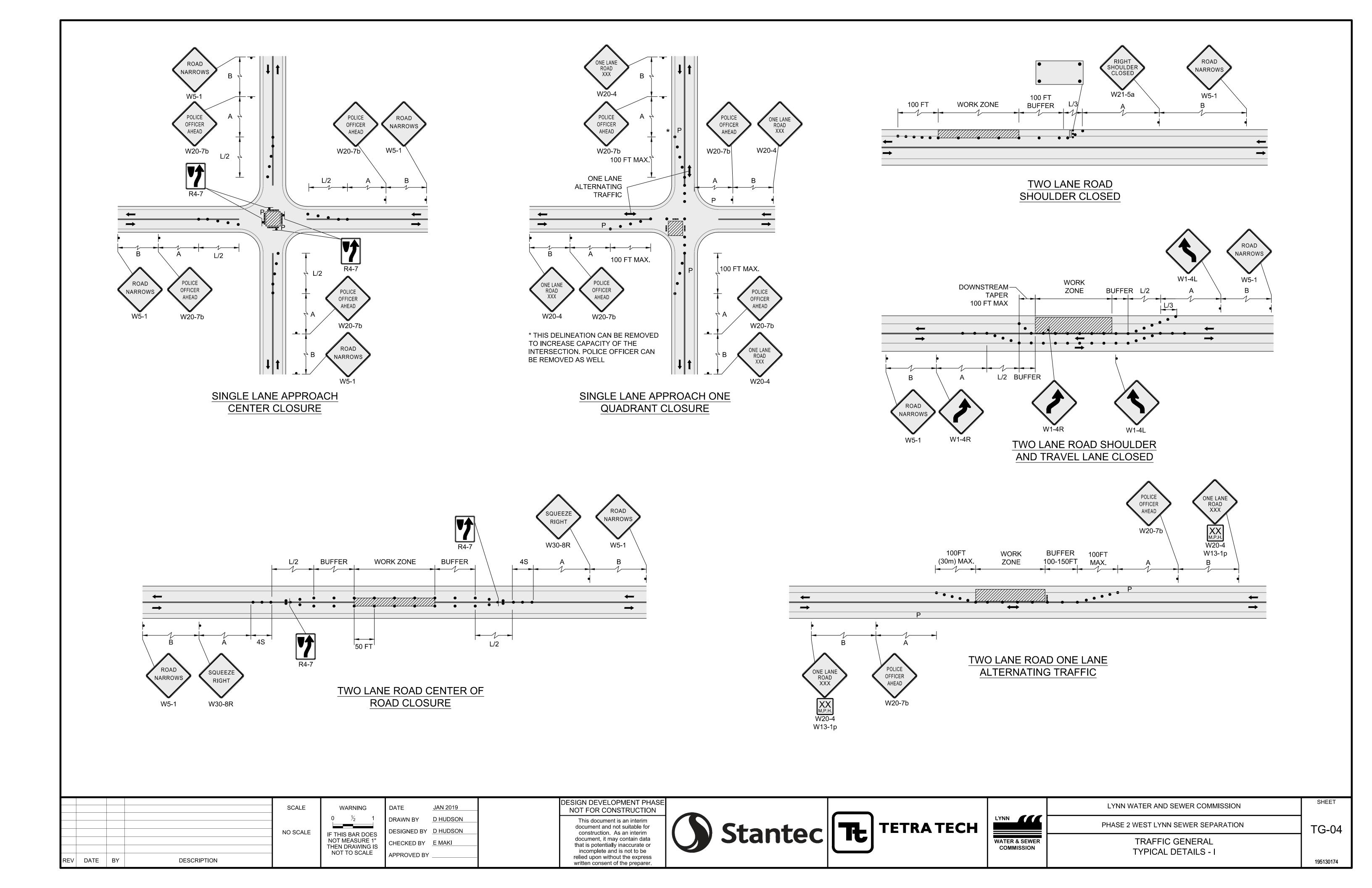


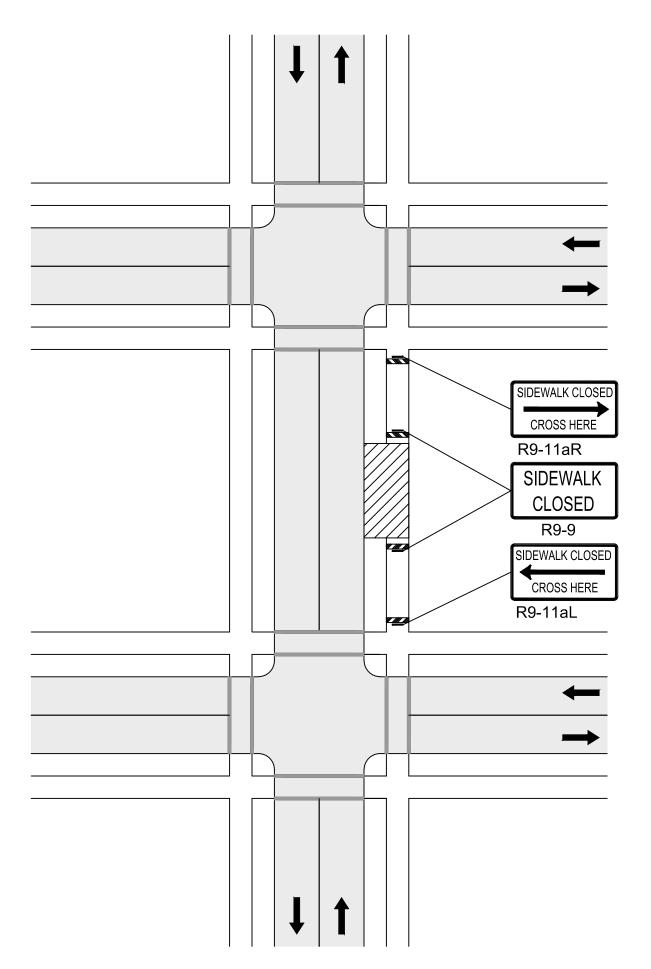




LYNN WATER AND SEWER COMMISSION PHASE 2 WEST LYNN SEWER SEPARATION TRAFFIC GENERAL LEGEND AND GENERAL NOTES

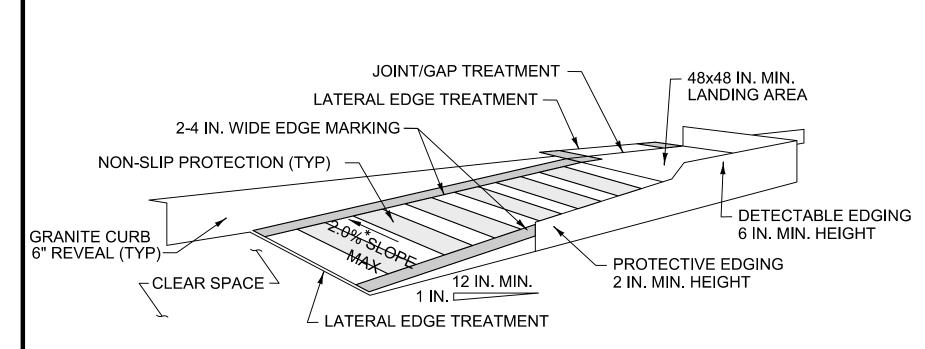






NOTE: IF A MINIMUM WIDTH OF 48" OF SOLID SMOOTH UNOBSTRUCTED SURFACE REMAINS ALONG THE WORK AREA THEN THE DETAIL CAN BE DISREGARDED. DELINEATION OF THE WORK AREA WILL STILL BE REQUIRED. All PEDESTRIAN DETOUR ROUTES SHALL BE ADA/MAAB COMPLIANT IN THEIR ENTIRETY.

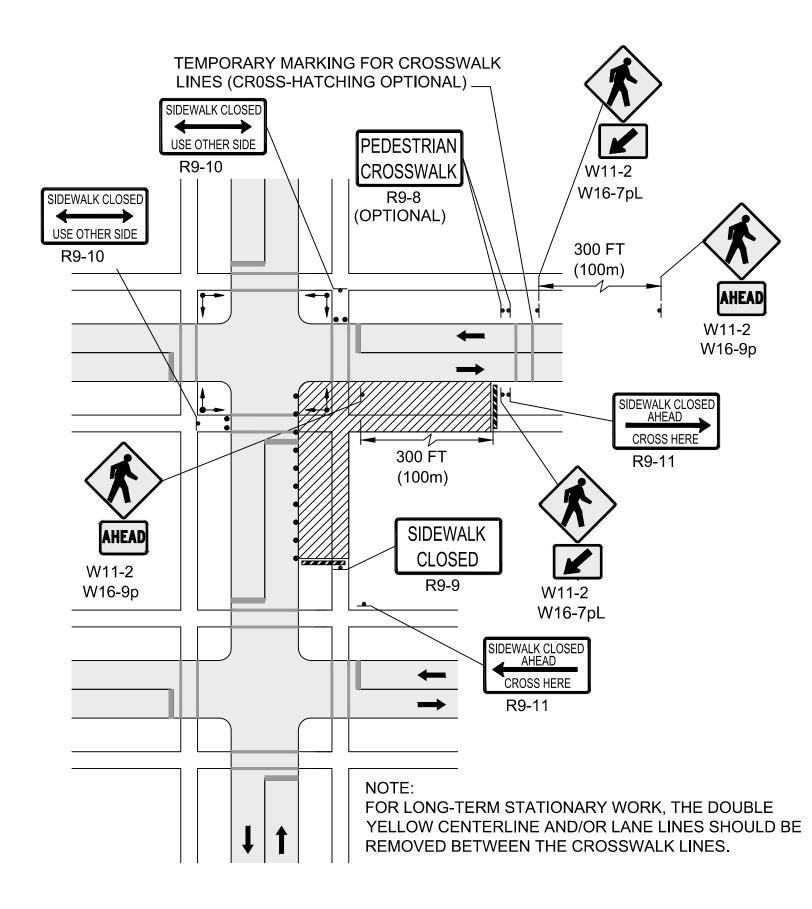
### SIDEWALK CLOSED WITHOUT DETOUR



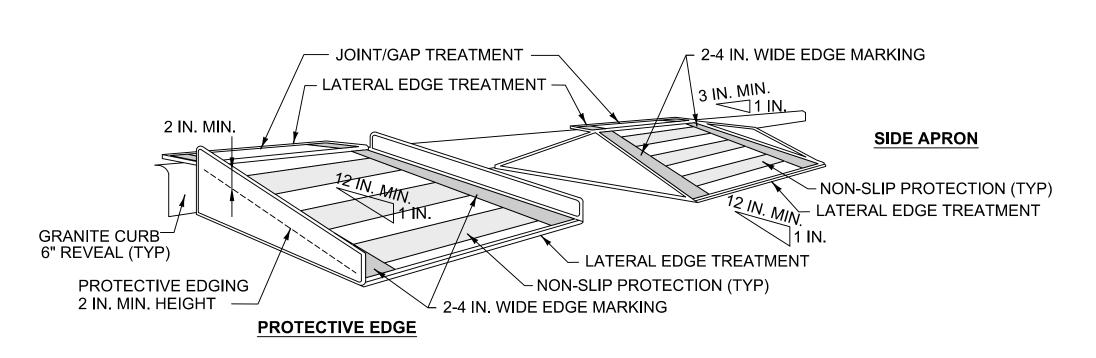
### TEMPORARY CURB RAMP - PARALLEL TO CURB

### **CURB RAMP NOTES:**

- 1. CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE AND NON-SLIP SURFACE.
- 2. PROTECTIVE EDGING WITH A 2 IN. MINIMUM HEIGHT SHALL BE INSTALLED WHEN THE CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6 IN. OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN THE CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3 IN. OR MORE.
- 3. DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- 4. CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.



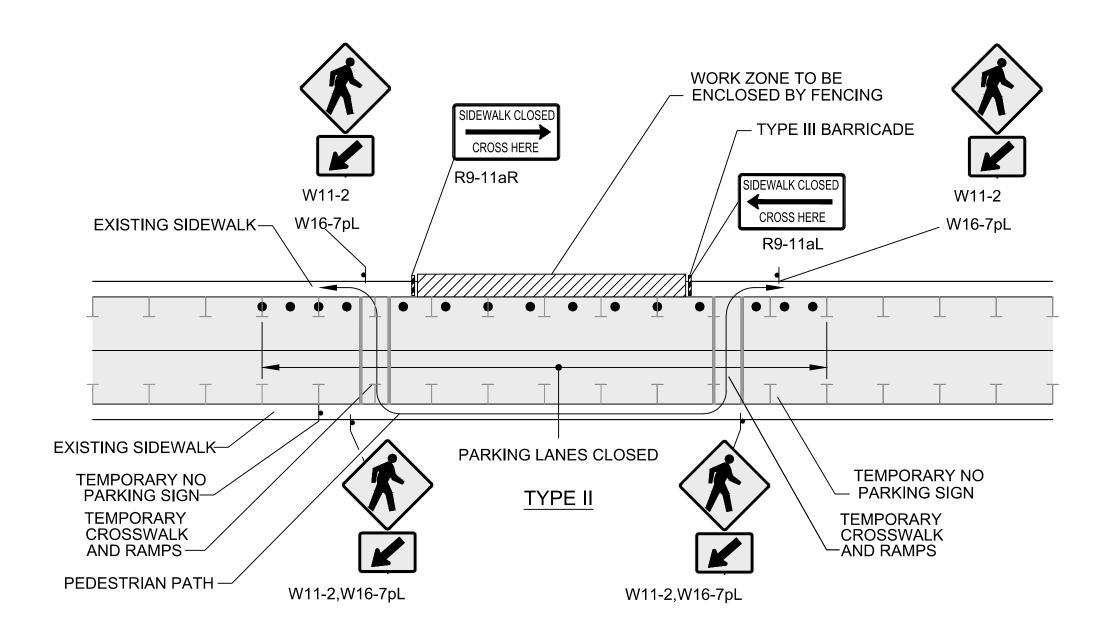
### PEDESTRIAN DETOUR



### TEMPORARY CURB RAMP - PERPENDICULAR TO CURB

- 5. CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- 6. THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A CONTRASTING COLOR 2 TO 4 IN. WIDE MARKING. THE MARKING IS OPTIONAL WHERE COLOR CONTRASTING EDGING IS USED.
- 7. WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
- 9. CHANGES BETWEEN SURFACE HEIGHTS SHOULD NOT EXCEED 0.5 IN. LATERAL EDGES SHOULD BE VERTICAL UP TO 0.25 IN. HIGH, AND BEVELED AT 1:2 BETWEEN 0.25 IN. AND 0.5 IN. HEIGHT.

# WORK ZONE TO BE ENCLOSED BY FENCING SIDEWALK CLOSED R9-9 EXISTING SIDEWALK PARKING LANE CLOSED EXISTING SIDEWALK TYPE III BARRICADE SIDEWALK CLOSED R9-9 PEDESTRIAN PATH PARKING LANE CLOSED TYPE III BARRICADE SIDEWALK TYPE III BARRICADE SIDEWALK TYPE III BARRICADE SIDEWALK TYPE III BARRICADE TYPE III BARRICADE

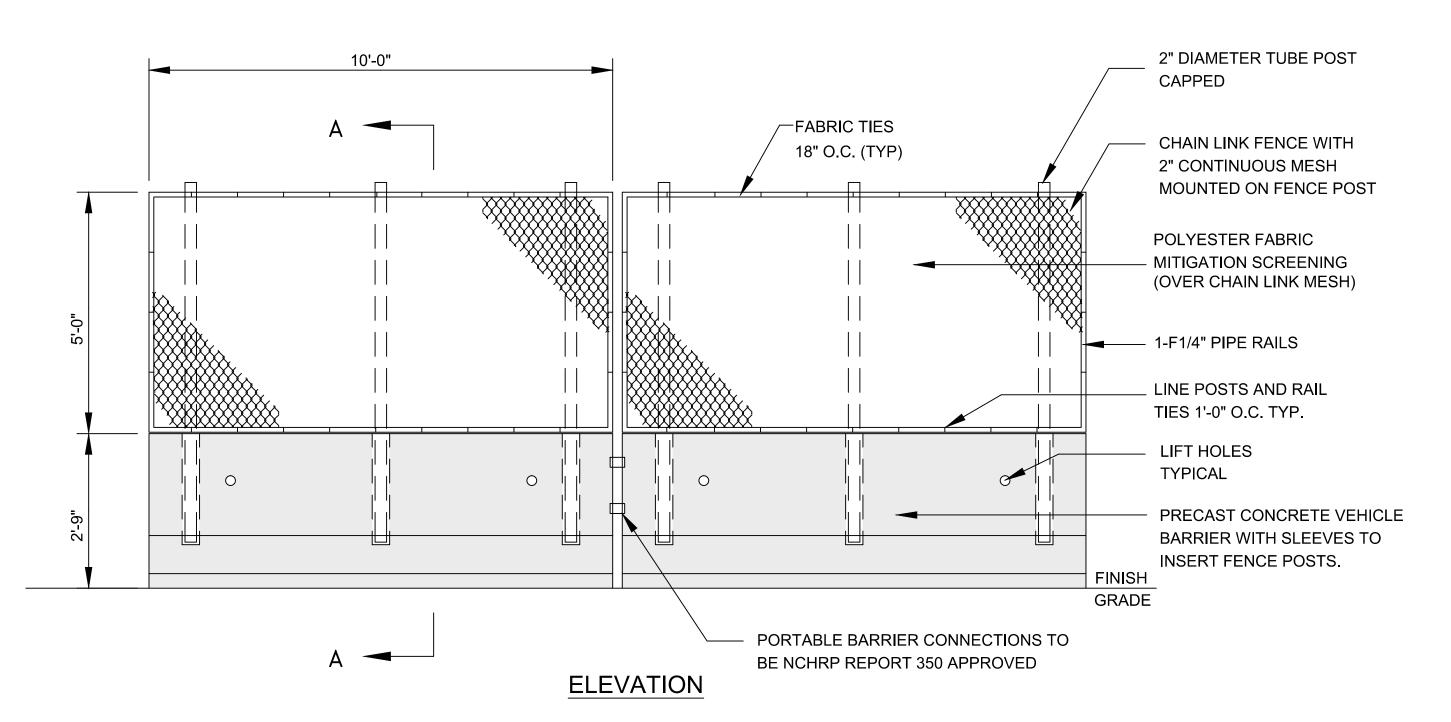


### PEDESTRIAN BYPASS NOTES:

- 1. ADDITIONAL ADVANCE WARNING SIGNS / DEVICES MAY BE NECESSARY.
- 2. CONTROLS ONLY FOR PEDESTRIAN TRAFFIC ARE SHOWN. VEHICULAR TRAFFIC SHOULD BE HANDLED AS SHOWN ELSEWHERE.
- 3. STREET LIGHTING SHOULD BE CONSIDERED WHEN LOCATING CONTROL DEVICES.
- 4. IF THE WORK ZONE DOES NOT PERMIT PEDESTRIANS TO TRAVEL ADJACENT TO IT AS SHOWN IN PEDESTRIAN BYPASS TYPE I, TEMPORARY CROSSWALKS WITH APPROPRIATE SIGNS SHOULD BE INSTALLED TO CROSS PEDESTRIANS TO THE OPPOSITE SIDE OF THE STREET AS SHOWN IN PEDESTRIAN BYPASS TYPE II, AND AS DIRECTED BY THE ENGINEER. TEMPORARY CURB RAMPS WILL BE REQUIRED AT ALL TEMPORARY CROSSWALK LOCATIONS.
- 5. BYPASS IS TO BE USED IN CONJUNCTION WITH THE PROPOSED LANE CLOSURE DETAILS AND DURING CONSTRUCTION STAGING, AS DIRECTED BY THE ENGINEER.
- 6. THE TEMPORARY SIDEWALK SHOULD BE A MINIMUM OF 4 FEET WIDE. IF THIS WALKWAY EXCEEDS 200 FEET THEN A 5 FOOT X 5 FOOT PASSING ZONE. (FOR SHORT TERM SETUPS < 10 HOURS, THIS CONDITION MAY BE WAIVED. A NOTE WOULD NEED TO BE INCLUDED IN THE TTCP THAT STATES HOW THE CONTRACTOR SHOULD ADDRESS THIS ISSUE.)

### PEDESTRIAN BYPASS

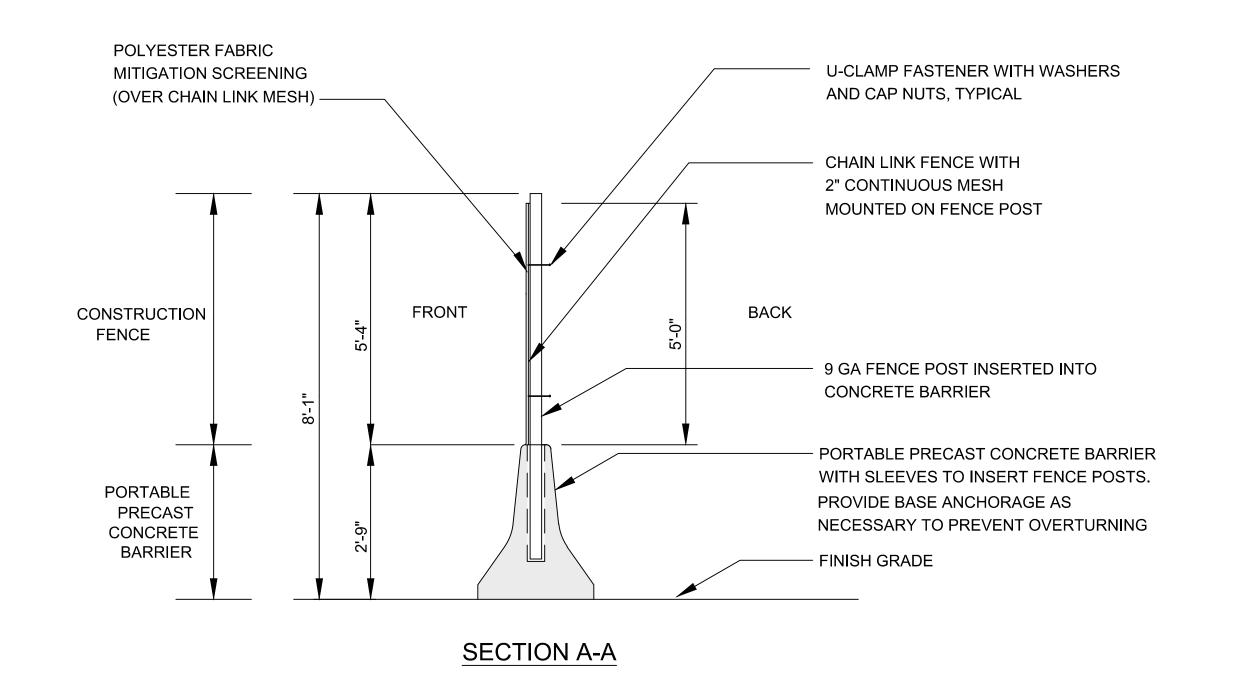
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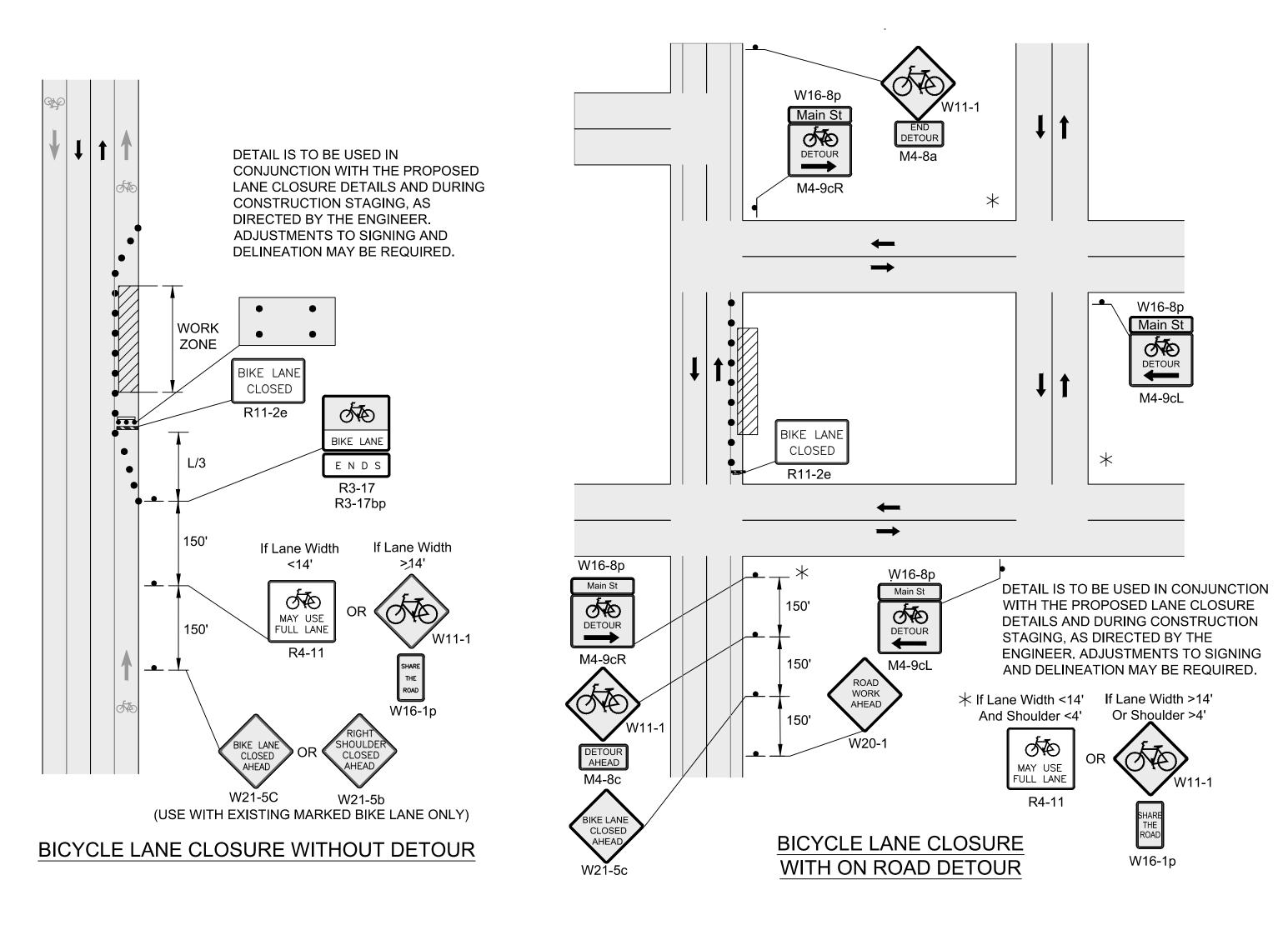


### TEMPORARY CONSTRUCTION BARRICADE ON PRECAST CONCRETE BARRIER

### APPLICATION GUIDELINES FOR TEMPORARY CONSTRUCTION BARRICADE

- 1. ALL CONSTRUCTION ZONES WHICH ARE IN PLACE LONGER THAN THE WORK DAY SHALL BE SEPARATED FROM PUBLIC ACCESS BY TEMPORARY PORTABLE CONSTRUCTION BARRICADE. BARRIERS SHALL BE INTERRUPTED ONLY BY GATES OR REMOVABLE BARRIERS USED TO ALLOW INGRESS AND EGRESS OF CONSTRUCTION PERSONAL, EQUIPMENT AND MATERIALS.
- 2. WHEN CONSTRUCTION BARRICADES WOULD JEOPARDIZE TRAFFIC SAFETY BY OBSTRUCTING VIEWS, ALTERNATE SITE ENCLOSURE PRACTICES SHALL BE USED WITH THE ACCEPTANCE OF THE ENGINEER.
- 3. CONSTRUCTION BARRICADE SHALL BE USED:
- a. TO ENCLOSE CONSTRUCTION SITES AND LAYDOWN AREAS WHERE TEMPORARY ROADWAY PROTECTION (CONCRETE BARRIER) IS REQUIRED.
- b. TO SEPARATE ALL PEDESTRIAN ROUTES FROM FROM CONSTRUCTION ZONES.
- c. IN LIEU OF CONSTRUCTION FENCE WHEN PERIMETER ENCLOSURE MUST BE FREQUENTLY RELOCATED ELSEWHERE AS NEEDED IF SPECIAL CONDITIONS EXIST.
- 4. TYPICAL CONSTRUCTION BARRICADE SHALL HAVE 9 GAUGE SIZE STEEL WIRES INTERWOVEN INTO TWO INCH CHAIN LINK MESH.
- 5. THESE DRAWINGS SHOW DESIGN INTENT ONLY. THE CONTRACTOR SHALL SUBMIT WORKING DRAWINGS AND TECHNICAL LITERATURE FOR REVIEW BY THE ENGINEER. SAID WORKING DRAWINGS AND SPECIFICATIONS SHALL DESCRIBE ALL CONDITIONS WHICH WILL BE ENCOUNTERED WITHIN THE CONTRACT AREA AND SHALL BE IN CONFORMANCE WITH ALL APPLICABLE CODES. UPON REVIEW AND ACCEPTANCE BY THE ENGINEER, SUBMIT SAMPLES OF ALL MATERIALS AND COMPONENTS FOR REVIEW BY THE ENGINEER.
- 6. BACK SIDE OF FENCES AND BARRICADES SHALL FACE CONSTRUCTION SITE. FRONT SIDE SHALL FACE PUBLIC
- 7. FASTENER SIDE OF LINE POST TIES SHALL BE ON BACK SIDE OF FENCES AND BARRICADES.







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••••	& SEWER MISSION

LYNN WATER AND SEWER COMMISSION PHASE 2 WEST LYNN SEWER SEPARATION TG-06 TRAFFIC GENERAL TYPICAL DETAILS - III

SHEET